

# FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

Thursday January 12 1984

D 8523 B

Slim lines and fat profits in U.S. car industry, Page 14

No. 29,218

Asia	Sch. 18	Indonesia	No. 2500	Portugal	Esc. 75
Belgium	No. 0.852	Italy	1,1100	S. Africa	R. 6.00
Canada	Cdn. 25	Japan	Y. 250	Switzerland	Sfr. 4.10
Denmark	DKr. 2.50	South Korea	W. 500	Spain	Ptas 100
France	Fr. 100	Taiwan	N. 20	Sweden	Skr. 4.10
Germany	DM 2.25	Thailand	B. 5.00	USA	D. 1.00
Greece	Dr. 200	UK	£ 1.00		
Hong Kong	H.K. \$ 1.00				
India	Rs. 20				
Italy	L. 1,100				
Japan	Y. 250				
South Korea	W. 500				
Taiwan	N. 20				
Thailand	B. 5.00				
UK	£ 1.00				
USA	D. 1.00				

## NEWS SUMMARY

### GENERAL

#### S. Korea rejects North's talk offer

South Korea rejected a North Korean proposal for tripartite talks with the U.S. on the future of the peninsula. The Seoul position is that two-way talks with the North, always previously rejected by Pyongyang, are quite feasible. The South Koreans believe that if the Americans were involved, they would be squeezed out by a predominantly North Korea-U.S. dialogue, which the North has proposed. Page 16

Seven South Koreans were yesterday given sentences of up to 10 years' prison for spying for North Korea.

### BUSINESS

#### Recovery in Hong Kong markets

HONG KONG share prices continued their recovery, buoyed by a new Chinese statement about its future. The Hang Seng Index closed 21 points up at 964.47, to complete a rise of almost 11 per cent in seven days. Page 16; Market report, Page 29; Background, leading prices, Page 32

TOKYO: Nikkei Dow index resumed its upward path with a 56.5 rise to a record 10,072.51. Stock exchange index rose 4.54 to 752.66. Report, Page 29; Leading prices, Page 32

WALL STREET: Dow Jones index closed 1.16 down at 1,277.32. Report, Page 29; Full share prices, Pages 30-32

LONDON: FT Industrial Ordinary index fell 8.8 to 790. Government securities showed falls averaging about 0.84 per cent. Report, Page 33, FT Shares Information Service, Pages 34, 35

### Jordan delay

Jordan's new Government postponed today's first session of parliament, recalled after 10 years apparently because King Hussein is being treated in hospital for a stomach ulcer.

### Bulgarian air crash

Fifty people were killed when a Bulgarian airliner crashed on landing at Sofia.

### Iran charge denied

Britain's Defence Ministry denied Iranian Premier Mir Hossein Mousavi's charge that Iraq had supplied with UK chemical weapons. Earlier story, Page 4

### Philippines switch

Philippines Central Bank Governor Jaime Laya was switched to the job of Education Minister, three weeks after admitting that the bank had heavily overestimated foreign exchange reserves. Page 4

### Bignone arrested

Former Argentine President General Reynaldo Bignone was under arrest, charged with responsibility for the disappearance of two army recruits in 1976.

### Herstatt check order

A Cologne court ordered a medical examination of Ivan Herstatt, who has pleaded that he is unfit to face trial on fraud charges. He was managing director of the Herstatt Bank, which collapsed in 1974 with debts of DM 1.2bn (\$450m).

### Vienna suicides

Eight people in Vienna took their own lives in 24 hours from Monday morning. Vienna suicides average 22 a month, one of the highest rates in Europe.

### Pope for Pacific

Pope John Paul will visit South Korea, Thailand, Papua-New Guinea and the Solomon Islands this May in his 21st trip outside Italy.

### London Tube snag

London Transport has discovered that a batch of new Tube (underground) trains built by Metro-Cammell are up to 15mm too wide. Page 4, 5

### Lost PA millions

Fortune hunters inundated the Press Association, the UK national news agency, with letters and telephone calls after news that holders of shares in the agency worth £3m cannot be traced.

### Obote on duty

Uganda President Milton Obote shut the gates to parliament buildings at 9.00 a.m. to catch civil servants arriving more than an hour late for work. Many of them complain they cannot afford his fares and have to walk to work.

## Kissinger commission urges \$8bn aid to Central America

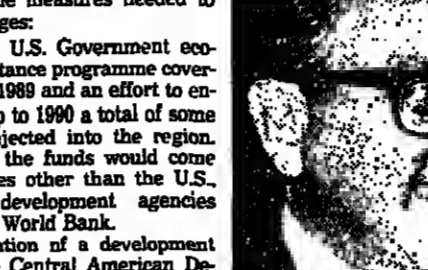
BY STEWART FLEMING IN WASHINGTON

A MASSIVE programme of military and economic aid to Central America and the creation of a new agency to co-ordinate much of its disbursement are among the recommendations contained in a report released yesterday by the U.S. commission headed by Dr Henry Kissinger, the former Secretary of State.

Introducing the bipartisan report, Dr Kissinger warned of a "lingering disintegration" in the region with serious consequences for U.S. security if aid was not substantially increased.

The report, which Dr Kissinger stressed represents a broad consensus among the 12 commissioners on the scope of the problem and the thrust of the measures needed to tackle it, urges:

- An \$8bn U.S. Government economic assistance programme covering 1985 to 1989 and an effort to ensure that up to 1990 a total of some \$24bn is injected into the region. About half the funds would come from sources other than the U.S., including development agencies such as the World Bank.
- The creation of a development agency, the Central American Development Organisation, to "give form and structure to the development effort" and act as the channel for perhaps a quarter of the U.S. aid. Its members would be the U.S. and those of the seven countries in the region "willing to commit them-



Dr Henry Kissinger serves to internal democracy and reform. ● A meeting of top leaders in Central America with the aim of put-

ting together a medium and long-term development plan. This would be preceded by the creation of an "emergency stabilisation programme" including an immediate \$400m increase in U.S. aid.

President Ronald Reagan, who commissioned the report last July, has yet to say in detail which elements of the findings he accepts.

After meeting members of the commission yesterday, he described the document as "the most comprehensive and detailed review of the issues as they affect our national security that I have ever seen." He added: "We must urgently seek solutions to the problems that are outlined in this study."

Commenting on the reservations which some members of the commission noted about certain of the recommendations, Mr Reagan expressed his gratitude to the "loyal opposition" for their efforts and for the fact that the commission did arrive at "a consensus recognition of the urgent nature and the complexity of the crisis in Central America."

A recommendation which is already stirring controversy - and which drew expressions of dissent within the commission - is the firm suggestion that the supply of aid, in particular to El Salvador, should be linked to "demonstrated progress towards free elections" and improvements in human rights.

Another recommendation, that the U.S. should continue to supply covert support to guerrillas attempting to overthrow the left-wing Sandinista regime in Nicaragua, also drew expressions of dissent.

Broadly, however, the Administration can draw comfort from the main thrust of the report - which is that Soviet and Cuban attempts to exploit social and political conditions in Central America, and the creation of a Marxist-Leninist state in Nicaragua, represent a serious challenge to vital U.S. security interests in a bordering region.

Details, Page 3; Editorial comment, Page 14

## PRESIDENT SUPPORTS ENTRY BY SPAIN AND PORTUGAL

# Mitterrand plans tour to press EEC bid for budgetary reform

BY DAVID HOUSEGO IN PARIS

President Francois Mitterrand will give fresh political impetus to the negotiations on EEC budgetary and agricultural reform with a tour of leading European capitals starting early next month.

He told the French Cabinet yesterday he would take charge of the negotiations which France intends should result in an agreement at the EEC heads of government meeting in Brussels in March.

Mitterrand is expected to visit Bonn on February 2 for talks with Chancellor Helmut Kohl, and visit the Netherlands the following week. Mitterrand did not mention a visit to London, although this is regarded as one of the chief steps in the tour.

The President also gave French blessing to Spain and Portugal's entry into the EEC. He told the Cabinet the Community must grow from 10 members to 12 and that the political consequences of keeping Spain out would be serious.

He wants the EEC to give Spain and Portugal a clear answer by the end of February on their demand for membership and no the procedures to be followed to admit them to the Community.

Mitterrand is thus aiming for an agreement on the enlargement of the Community in advance of the March EEC summit which could decide on budgetary and agricultural reform.

The intensive round of consultations reflects the French view that

### ATTACK BY GISCARD

Former President Valéry Giscard d'Estaing, in an angry defence of his role in the "oil sniffer" aircraft affair, said his successor, President Mitterrand, was no longer "qualified to represent the unity of France." Page 16

### heads of government can provide a political dimension which was lacking at Athens and which led to the breakdown of the summit.

In the case of Britain, talks between Mitterrand and Mrs Margaret Thatcher, the UK Premier, are seen by British and French officials as necessary to remove the "misunderstandings" which arose between them at Athens. On Britain's side there is also a mistrust of negotiations with French Ministers over the EEC dispute as they feel uncertain that Ministers have Mitterrand's support.

In Athens the French President backed away from positions over controlling budget expenditure and the British budget contribution established by M Jacques Delors, the Finance Minister, and by senior French officials. Officials explain Mitterrand's attitude by his exasperation with the "combative" negotiating position of Mrs Thatcher.

In visiting West Germany first, President Mitterrand reflects the French view that the heart of any EEC compromise must lie in a Franco-German understanding.

Mitterrand rules out Cabinet changes, Page 2

## Nigeria seeks to assess trade debts

By Tony Hawkins in Lagos

NIGERIAN importers have been given until January 23 to give the central bank of Nigeria details of the estimated \$4bn to \$5bn backlog of payments due to foreign suppliers.

The move is seen as an attempt by the new military Government to get an accurate figure on the arrears in trade payments, and its urgency is an indication of the regime's determination to resolve the repayment question as a top priority.

A circular to the Nigerian banks released yesterday says the details are needed by the Nigerian Ministry of Finance and the central bank, which are seeking to refinance all claims outstanding at the end of last year in respect of imports on open account, bills for collection and unconfirmed letters of credit.

Details must also be submitted in the next fortnight of the backlog of payments from Nigeria of dividends, interest and management fees.

The circular also gives details of a new priority ranking for imports. Seven import categories have been established with top priority given to essential raw materials followed by spare parts, essential food imports, medical supplies, books and laboratory equipment, capital goods, and, in the lowest category, other consumer items.

The circular spells out the severe cuts in foreign travel allowances announced on Tuesday. The basic travel allowance has been cut from

## U.S. rebuffs Europe's call to cut deficit

BY OUR FOREIGN AND ECONOMIC STAFF

THE U.S. has rebuffed a fresh appeal from its major Western partners for urgent action to cut the U.S. budget deficit and bring down high interest rates.

The plea, and its rejection came in a meeting of senior officials from the Group of Five industrial nations in Washington earlier this week, according to European monetary officials.

Meanwhile, the dollar resumed its climb on foreign exchange markets yesterday, hitting records against sterling and several other European currencies and a 10-year peak against the D-Mark.

Washington's attitude has provoked anger in France, where the Finance and Economy Minister M Jacques Delors strongly criticised U.S. policy at a Cabinet meeting yesterday, calling it "egoistic and damaging to the developing world."

The Group of Five, which comprises the U.S., Japan, West Germany, Britain and France, holds regular meetings at senior official and ministerial level to co-ordinate economic and monetary policies.

According to the officials the U.S. Administration told the other members at this week's meeting nothing could be done before the presidential elections to bring prospective budget deficits below \$200bn.

Over the longer term, the most Washington could offer was the prospect of a gradual fall to \$100bn.

The U.S. Administration also rejected any idea that monetary policy could be relaxed to ease upward pressure on interest rates, arguing

that it could not interfere with the independence of the Federal Reserve Board, the officials said.

Other Western governments have made repeated pleas for the U.S. to reduce its budget deficit, which they say is pushing up interest rates and the dollar, and threatening sustainable economic recovery in the rest of the world.

Washington's reaction at this latest meeting is likely to encourage M Delors in his attempts to secure agreement among other Western nations on a strategy to soften the impact of U.S. policies, the officials said.

France will host a ministerial-level meeting of the Group of Five in Paris next month, where the French minister is expected to press for a new issue of Special Drawing Rights (SDR) by the International Monetary Fund to try to hold down the dollar.

Although the other four members of the group are broadly in agreement on the need for the U.S. to curb its budget deficit, there are important differences on the best response to the rebuff.

West Germany fears the inflationary impact of a new SDR issue, and is sceptical about an injection of liquidity into the world economy which will have a real impact on the value of the dollar.

Officials in Bonn say the Government shares France's concern about the impact of U.S. policies, but the two countries differ on what practical steps can be taken.

## Israeli Cabinet near budget cuts accord

BY DAVID LENNON IN TEL AVIV

AN all-night session of the Israeli Cabinet's inner economic committee appears to have produced a breakthrough in efforts to trim the budget for 1984-85, a prerequisite for tackling the country's economic crisis.

After 12 hours of discussion, a majority of the ministers agreed early yesterday to accept in principle most of the budget cuts demanded by Mr Yigal Cohen-Orgad, the Finance Minister.

The minister insisted on a 9 per cent across-the-board cut in the budgets of all the ministries. With most of the Cabinet behind him, Mr Cohen-Orgad now faces the task of persuading the Defence and Education Ministries, the two largest departments in budget terms, to conform with the rest of their colleagues.

Despite the apparent success of the marathon debate, which should strengthen the hand of the new Finance Minister, he still faces the question of the actual implementation of the cuts.

His predecessor, Mr Yoram Aridor, also won Cabinet agreement to budget cuts during a similar all-night session last August, but they were never implemented, as the ministers later backed down from their commitments.

To achieve the agreement on cuts, Mr Cohen-Orgad had to make concessions to Mr Aharon Uzan, the Welfare Minister, because of his threats to quit the Cabinet and bring down the coalition. Mr Cohen-Orgad agreed to provide the Welfare Ministry with a supplementary budget to finish the present fiscal year. It was also agreed that the cuts in the welfare budget would be less than for other ministries.

Underlining the difficulties facing the economy, the Central Bureau of Statistics announced yesterday that Israel's trade deficit increased by 17 per cent last year to \$3.4bn. That resulted from a 3 per cent drop in exports and a 4 per cent growth in imports.

## Madrid shakes up military

By David White in Madrid

SPAIN'S Socialist Government yesterday replaced the whole top echelon of the country's military hierarchy.

The sweeping changes, the extent of which was unexpected, included the naming of a naval officer to the country's new top armed forces job.

The appointments were made under a recent law setting up a new structure at the Ministry of Defence and are intended to bring the military more directly under the command of the civilian authorities.

The law abolishes the previous role of the Joint Chiefs of Staff as Spain's senior military body.

Admiral Angel Liberal Lucini, a former under-secretary at the Ministry of Defence during the last centrist administration, has been named to the new post of Chief of Defence Staff, under the Minister.

The Cabinet yesterday also

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Section IV

## CLWYDS FRENCH CONNECTION

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46 The financial aid and clean air environment are just two factors that influenced our decision to stay and expand in Clwyd.

Robin McEwen-King, General Manager, Pilkington Fibre-optic Technologies.

Clwyd's French connection started when Pilkington—in hot competition with French owned companies—won a contract to design and manufacture an electro-optical monitoring system for the French Lottery.

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EUROPEAN NEWS

Mitterrand appears to rule out major changes in cabinet

BY DAVID HOUSEGO IN PARIS

THE FRENCH President, M. Francois Mitterrand, has given his strongest indication that he intends to retain M. Pierre Mauroy as Prime Minister for some months yet. Remarks to the weekly Cabinet meeting were interpreted as meaning that he has postponed any significant Cabinet changes until the summer.

French compromise on jobless payments

BY DAVID MARSH IN PARIS

FRENCH employers and trade unions, after months of wrangling, have worked out an uneasy compromise on slimming down and cutting some benefits in the country's unwieldy and financially-strained unemployment insurance system.

EEC may raise duties on some U.S. imports

BY PAUL CHEESERIGHT IN BRUSSELS

THE EEC is poised to raise its duties and impose quotas on imports of U.S. chemical, plastics and sporting equipment products.

Swedes reject cut, approve thrust, in attack on budget deficit

Kevin Done reports on Stockholm's budget, moving against the trend

THE Swedish Government has chosen to gamble on growth as a way out of its budgetary crisis. It has published a modestly restrictive financial plan for 1984-85, but the planned small reduction in the budget deficit owes more to imaginative cash management than to a willingness to take the axe to spending.

Italy puts off action on budget deficit

By James Buxton in Rome

THE ITALIAN Government has decided for the moment against extra measures to reduce its 1984 budget deficit, despite the fact that it is set to exceed its original target.

IMF credit talks open in Belgrade

By Aleksandar Lahi in Belgrade

TALKS WITH the International Monetary Fund about another standby credit for Yugoslavia have resumed here, with IMF officials insisting on interest rate increases to match the 1983 inflation rate of about 15 per cent towards the end of last year.

Sweden may return seized equipment

Sweden is expected to follow West Germany in returning to the U.S. highly sensitive computer equipment which was being smuggled to the Soviet Union through Swedish ports, writes David Brown in Stockholm.

COALITION GAINS ELEVEN SEATS BUT NOT ENOUGH FOR AN ABSOLUTE MAJORITY

Election fails to cure Denmark's Finance Bill headache

DENMARK AWOKE to a severe political hangover as Tuesday's General Election, which failed to clarify the political situation. The results, taken at face value, seem to point to another election within weeks.

Only 312 votes separate the Socialist Party and the Liberals nationally, and re-counting could give the latter and the coalition one more seat for a theoretical 89 seats, enough for a tied vote if one Faroese member abstains.

Jailed Glistrup returned to Parliament



DENMARK'S first convict to be elected to the Folketing (Parliament) - Mr Helge Glistrup (left) who leads the tax-protest Progress Party - declared that his re-election in Tuesday's poll was a "triumph for justice," writes Hilary Barnes.

Table with 4 columns: Party, 1981 (Percent of vote in parentheses), 1981, 1984. Rows include Social Democrats, Radicals, Conservatives, Socialist People's Party, Centre Democrats, Christian People's Party, Liberals, Left Socialists, Progress Party, Greenland, and Faroes.

Haste brings problems for Soviet gas pipeline

BY ANTHONY ROBINSON

THE DEATH of a British engineer and a series of other accidents along the controversial Siberia-Western Europe export gas pipeline appears to undermine the high extra costs facing the Soviet Union as a result of speeding up construction for propaganda reasons.

BY JOHN WYLES IN BRUSSELS

THE SOVIET Union has completed in the past month another SS-20 intermediate-range nuclear missile site in the Eastern USSR, bringing its total number of launchers to 378 with 1,134 warheads, Mr James Dobbins, U.S. Deputy Assistant Secretary of State for European Affairs, reported in Brussels.

Spanish monetary curb delayed

BY DAVID WHITE IN MADRID

MEASURES TO clamp down on monetary growth in Spain by immobilising a larger share of banks' funds have been delayed by almost a week because of a bureaucratic slip-up.

French action on Eta welcomed

BY OUR MADRID CORRESPONDENT

A ROUND-UP by French police of Spanish Basque exiles accused of terrorist activities has been hailed in Madrid as a political victory after a period of heightened tension between the two countries over the Basque issue.

Soviet Union 'builds another SS-20 site'

Commenting on the completion of another SS-20 site, he added that it was "difficult" to understand the Soviet contention that the beginning of Nato deployment in any way justified their decision to end the negotiations.

State debt

BY DAVID WHITE IN MADRID

State debt has jumped from SKr 36bn in 1972 to around SKr 470bn today and interest payments on that debt are now one of the biggest items in the central government budget. For 1984-85 central government expenditure is estimated at SKr 304.9bn compared with an income of only SKr 224.1bn.

Falling incomes

BY DAVID WHITE IN MADRID

The Social Democrats clearly feel that there have done all that is politically possible, however. Swedes have already suffered declining real incomes for the past three years, and the tax burden on one of the most heavily taxed nations in the world has not yet been reduced.

Handwritten Arabic text at the bottom of the page.

The main points...

THE Commission makes three sets of recommendations: an emergency stabilisation programme, a medium and long term programme and "additional measures."

The emergency programme prescribes:

- A meeting of U.S. and Central American leaders to agree on an approach to economic development and the reorganisation of the Central American Common Market;
• An additional \$400m in U.S. aid in fiscal 1984 to be spent on labour-intensive infrastructure projects and housing;
• U.S. government guarantees for short-term trade credit and emergency loan to the Central American Common Market along with U.S. Government aid to solve foreign debt problems.

THE KISSINGER COMMISSION REPORT

Central America 'vital to U.S. global strategy'

BY STEWART FLEMING IN WASHINGTON

THE Kissinger Commission report released yesterday broadly supports Reagan Administration policies in Central America, particularly their emphasis on the strategic challenge to U.S. interests posed by the Soviet Union, Cuba and Nicaragua.

The bi-partisan commission on Central America, chaired by Dr Henry Kissinger, the former U.S. Secretary of State was set up last July, amid mounting concern in the U.S. at the drift of Mr President Reagan's policies in the region, with the aim of trying to arrive at a consensus which a broad spectrum in both the Republican and Democratic parties could endorse.

It is highly critical of the "death squads" and it sees the improvement of human rights there and in the region as just as vital in achieving peace and security as success against insurgency.

Dr Kissinger has had to work hard to stop several members of the Commission from filing formal dissenting statements. As it is, the report has an addendum of "notes by individual Commissioners" in which relatively strong reservations are expressed on several key issues.

Nicaragua, Mr Carlos F. Diaz-Alejandro a Commissioner who is Professor of Economics at Yale University and Mr Henry G. Cisneros, Mayor of San Antonio in Texas, are firmly opposed to more covert aid. They take issue with the main body of the report which says: "We do not believe that it would be wise to dismantle existing incentives and pressures on the Managua regime, except in conjunction with demonstrable progress on the negotiating front."

The Commission sees El Salvador as a critical factor in the "crisis" of Central America, but paints what some of its critics will say is too rosy a picture of the country's progress towards creating democratic structures and pushing through land reform.

The extreme political violence in El Salvador is totally repugnant, it says, "designed to terrorise opponents, fight democracy and restore reactionary regimes."

Mr Robert Strauss, former chairman of the Democratic Party, and widely recognised as one of its most powerful figures says, however, in a brief statement: "In my view in many Central American countries, the creation and/or preservation of pluralistic Government depends as much or more on a basic restructuring of internal political and social institutions, as on military assistance."

The report discusses the development of Soviet and Cuban-inspired insurgency, suggesting similarities in tactics in different countries. In the case of Nicaragua the report claims this has led to the establishment of a Marxist-Leninist Government modelled on Cuba—a Cuban-style regime.

The strongest theme emerging which will be seen as reflecting Dr Kissinger's thinking, is the emphasis on the U.S.'s vital security and strategic interests in Central America. "The Soviet-Cuban thrust to make Central America part of their geo-strategic challenge is what has turned the struggle in Central America into a security and political problem for the U.S. and for the hemisphere," the report says.

In Chapter 6 of the report, which seems certain to attract much critical analysis, the Commission says that in the past the U.S. "has been able to take for granted our security in our own hemisphere." It stresses that "indigenous reform movements, even indigenous revolutions, are not themselves a security concern for the U.S., adding that there have been in the Americas "genuinely popular revolutions," such as that in Mexico.



"The kind of insurgencies we confront in Central America," which it says have three characteristics. They depend on external support; they develop their own momentum, independent of the conditions on which they seize, and "the insurgents, if they win will create a totalitarian regime in the image of their sponsors' ideology." It adds: "Regimes created by the victory of Marxist-Leninist guerrillas become totalitarian."

This could permanently increase the U.S. defence burden or force it to reduce important commitments elsewhere in the world. It adds: "From the standpoint of the Soviet Union, it would be a major strategic coup to impose on the U.S. the burden of defending our southern approaches." The Commission maintains that the threat means that Europe has "a security interest in Central America, albeit an indirect one, which unfortunately... is not always well appreciated in Europe."

Argentine interest payments behind by more than \$2.9bn

BY DAVID WELNA IN BUENOS AIRES

ARGENTINA HAS fallen behind in its foreign debt repayments by more than \$2.9bn (£2.1bn), according to Sr Enrique Garcia Vazquez, president of Argentina's central bank. The figure is nearly \$1bn more than the amount of interest arrears estimates in recent weeks.

The announcement was made late on Tuesday evening to the budget and finance commission of the Chamber of Deputies in a two-hour speech. Sr Garcia Vazquez also said that as at the end of last year, the foreign debt amounted to \$43.6bn, as opposed to the \$38bn-\$42bn previously estimated.

He said that \$1bn of that debt had not been properly registered, and that the central bank is still awaiting findings on debts contracted outside the country.

The central bank president reported that there are only \$387m available in foreign reserves, despite the previous government's efforts to give the impression that available foreign currency increased by revaluing the country's gold reserves.

Sr Garcia Vazquez said Argentina will seek a new agreement with the International Monetary Fund for an immediate loan of \$900m. Argentina's present agreement with the fund expires on March 31.

Sr Garcia Vazquez added Argentina would not be able to renegotiate its foreign debt nor pay interest on it until mid-year. He justified this move by saying that the new Government still needs time to determine the country's existing debt service arrears and a continuing lack of precise economic information have made banks very wary of extending additional short-term trade finance.

Meanwhile, Sr Bernardo Grinspun, the Argentine Economy Minister, is expected to hold talks today in Washington where he is meeting with U.S. officials and the heads of the IMF and the World Bank. Sr Grinspun's trip is seen here as both an effort to hold creditors at bay while the Government investigates the country's foreign obligations, and as an attempt to round up short-term credit to meet pressing import requirements.

Peter Montague adds from London: Sr Bernardo Grinspun, Argentina's Economy Minister, has been telling commercial bankers in New York that the country needs more trade credit from them if it is to raise the cash to pay interest on its foreign debt.

But the country's existing debt service arrears and a continuing lack of precise economic information have made banks very wary of extending additional short-term trade finance. Both sides remain very cautious in their approach to renegotiating Argentina's foreign debts due this year and bankers expect discussion to drag on for weeks if not months.

There is, however, little fear in the banking community that Argentina intends to formally declare a unilateral moratorium on debt payments.

Beagle channel dispute solution 'imminent'

BY OUR BUENOS AIRES CORRESPONDENT

SR DANTE CAPUTO, the Argentine Foreign Minister, is to meet with his Chilean counterpart in Rome on January 23 for what the Argentine Foreign Ministry yesterday described as an effort to intensify negotiations leading to a "happy ending" of the long-standing dispute between the two countries over the jurisdiction of three small islands in the Beagle Channel.

The conflict has been mediated by the Vatican since the two countries nearly went to war in late 1978 over ownership of the three bleak islands, Lennox, Picton and Nueva, off the southernmost tip of South America.

The Argentine Foreign Ministry yesterday indicated that the Vatican's proposal for settling the dispute, giving Chile jurisdiction over the contested islands, will be the basis for a final treaty.

Legislators who met with Sr Caputo in Buenos Aires on Tuesday said the Foreign Minister was opposed to questioning the Vatican's recognition of Chile's sovereignty over the islands. They said Argentine sovereignty over the islands might only be attained militarily, an option which they said the Alfonsina Government rejected "totally."

Argentine diplomatic officials said the only matter left to be negotiated is the extent of Chile's eventual jurisdiction over ocean waters.

Taiwan 'remains stumbling block'

BY STEWART FLEMING IN WASHINGTON

CHINESE Prime Minister Zhao Ziyang has given President Reagan a clear sign that U.S. support for Taiwan continues to be a serious impediment to improving U.S.-Sino relations.

At a Washington dinner given in Zhao's honour by the President on Tuesday night, the Chinese premier described the Taiwan issue as "the major difference between China and the United States."

Relations between the two countries had suffered "jolts and uncertainties" in the five years since full diplomatic relations were restored and Taiwan was the chief cause of the in-

stability, he said. The remarks were seen as a strong hint that the long running dispute over Taiwan cannot be brushed away with promises of expanded trade.

China has long been unhappy with U.S. arms sales to Taiwan and Washington's unofficial relationship with the nationalist-held island, which Peking regards as a breakaway province.

Zhao's statement poses something of a political problem for President Reagan in an election year, for it will remind voters who backed his strong support for Taiwan in the 1980 election campaign of the extent to which

he has moved in the past two years to improve Sino-U.S. relations.

Zhao yesterday urged members of the U.S. Congress to change the law preventing less developed Communist nations from receiving trade and other economic aid from the United States.

He made the request to House members at a reception and later met the Senate's majority and minority leaders, Republican Howard H. Baker Jr and Democrat Robert C. Byrd.

Brain drains threat to high tech Taiwan, Page 4

Quito summit warning on debt payment crisis for Latin America

BY OUR FOREIGN STAFF

LATIN AMERICAN leaders meeting in Quito are expected to warn the more developed countries that they will not be able to service the \$310bn of foreign debt unless interest rates fall.

"If we cannot find a solution to change the terms of the cost, the grace periods and new funds we will not be able to pay the debt," said Sr Manuel Ulloa, former prime minister and delegate of Peru.

The Latin American economic summit is being attended by

the Presidents of Costa Rica, Colombia, Ecuador and the Dominican Republic, the Vice-President of Cuba and the Peruvian and Jamaican Prime Ministers.

The final statement to be called 'The Declaration of Quito,' is due to be agreed today despite objections from the delegates of Mexico and Brazil.

The declaration is also likely to call for reductions in the tariff and non-tariff barriers to

Latin America's exports. The conference is also expected to condemn "recent interventions" in Latin America and call for a negotiated settlement in Central America.

The Quito summit may also attempt to breathe fresh life into the economic integration programmes in Latin America which have been severely hit by the world recession and recommend new moves to promote trade within the region.

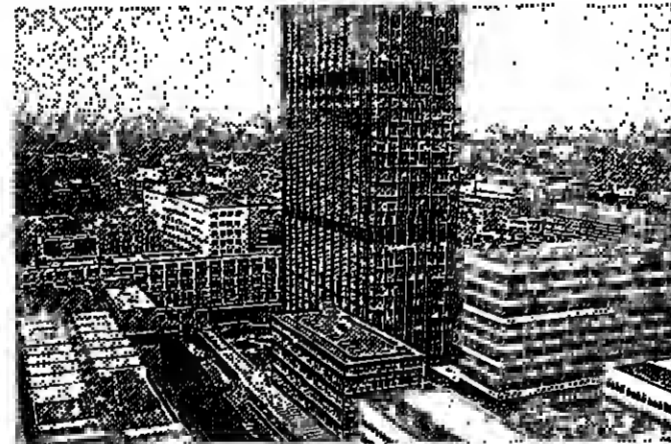
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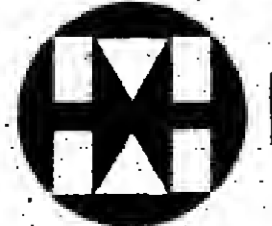
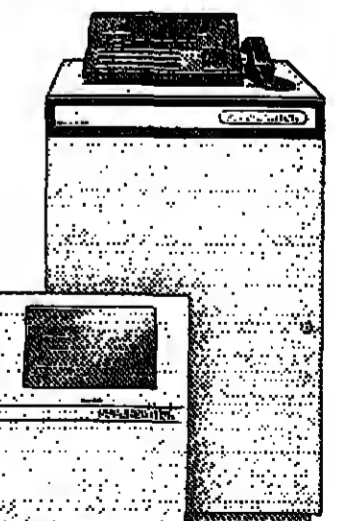
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OVERSEAS NEWS

Philippines resignation may delay debt talks

By Emilia Tagaza in Manila THE Resignation of Mr Jaime Laya as Philippines central bank governor was accepted yesterday by President Ferdinand Marcos to a move which can be expected to delay further the country's negotiations for rescheduling its foreign debt.

Singapore key transit contract for UK

By Hazel Duffy, Transport Correspondent, in London SINGAPORE has awarded a key contract to Westinghouse Brake and Signal, part of the Hawker Siddeley group. The UK group will supply signalling and platform doors to the new mass transit project.

Howe emphasises role of PLO

BY OUR MIDDLE EAST STAFF

SIR GEOFFREY HOWE the British Foreign Secretary, called yesterday for a radical change in Israeli policies in order to help the Middle East peace process.

right of the Palestinians to self-determination. Those rights remain the core of any solution. "This places a heavy responsibility on Israel to change radically its current policies in the occupied West Bank and Gaza and to look again, constructively, at President Reagan's proposals."

which Britain is a contributor. Mr Donald Rumsfeld, the U.S. Middle East envoy, is due in Damascus later today for his first visit since the slight thaw in Syria-U.S. relations brought about by the release of an American airman shot down over Lebanon.

ing of the Geneva talks between the different Lebanese factions and culminating in the formation of a government of national reconciliation. Mr Rumsfeld will be looking for some Syrian assurance that it will not seek to block this process, but is certain to meet the demand that the May 17 troop withdrawal agreement between Israel and Lebanon should first be amended.

Britain accused by Iran

TEHRAN — Iranian Prime Minister Mir-Hossein Mousavi attacked Britain yesterday for allegedly selling chemical weapons to Iraq and warned that "hostile policies" would not go unanswered.

Malaysia approves planning review

KUALA LUMPUR — The Cabinet approved on Tuesday the final draft of the mid-term review of the fourth Malaysia plan with some projects trimmed, the New Straits Times reported yesterday.

Order to deploy Lebanese army revoked at last minute

BY NORA BOUTSTANY IN BEIRUT

THE LEBANESE army was to be put on full alert on Tuesday when the order was revoked at the last minute, an army spokesman disclosed yesterday.

Lebanese troops and police were to take up positions along coastal roads, in the Beirut suburbs and in mountain towns and villages.

Other leftist and Communist leaders who met Mr Jumblat in Damascus on Tuesday echoed that view and expressed opposition to the deployment of the army and its interference in internal conflicts until it represents equally Christians and Moslems.

reconciliation conference. Mr Jumblat met Mr Jumblat in Damascus on Tuesday. The steady drain of top talent — annually 70 per cent or more of graduates from the National Taiwan University — has even deterred students from Taiwan.

In canvassing support for its much-debated plan to extend state authority beyond the Beirut area, the government has said it will accelerate efforts for political reforms, including changes in the country's mainly Moslem but Christian-commanded army.

Nippon Steel to boost output in bid to counter rising imports

BY YOKO SHIBATA IN TOKYO NIPPON STEEL, the world's largest steel maker, has decided to boost production of rolled steel products in an attempt to counter rising imports from South Korea, Taiwan, Brazil and Romania.

The Japan Iron and Steel Federation has set up a committee to investigate the situation and has put pressure on the Government to take action over any steel dumping. However, Government agencies have responded coolly in anticipation of reaction from overseas.

standardised imported products, but it will boost production of standardised products in good quality which will be welcomed by Japanese users, despite higher prices.

U.S. asked to clarify computer sales curb By Christian Tyler, Trade Editor THE U.S. Commerce Department has been asked to clarify whether U.S. export controls apply to sophisticated American computers which change hands within the UK.

Rolls-Royce faces tough competition on orders, Michael Donne writes Boeing engine battle grows

TOUGHER competition for Rolls-Royce in the battle for engine orders in the Boeing 757 jet airliner is now emerging, with the certification of Pratt and Whitney's PW 2037 engine, the rival to Rolls-Royce's RB-211-538-E4 engine.

Other airlines which have ordered Boeing 757s with Pratt and Whitney PW-2037s are Northwest Orient and Singapore Airlines.

powder-metal disc material is 15 per cent stronger than present materials and able to sustain higher loads. Together with other improvements, such as electronic engine controls, Pratt and Whitney believes its engine will win substantial customers for the 757 in the period ahead.

has also announced that it has recently completed the first full-scale testing of the high pressure compressor (the "hot core") of its new PW-4000 high-thrust engine.

Hong Kong export credits loss

HONG KONG — The Government-owned Hong Kong Export Credit Insurance Corporation suffered a net loss of HK\$66m (US\$106m) in the fiscal year ended March 31 1983 and lost its coverage in September, Mr Eric Ho, Secretary for Trade and Industry, said yesterday.

customer services manager, added that the corporation is headed for another deficit in the current fiscal year, largely due to two corporate failures in Italy and political problems in Venezuela. He said that the bankruptcy of two toy companies in Italy had required large payouts.

One source of the larger payout this year is the loss of re-insurance coverage. The Swiss Re-Insurance Corporation of Zurich notified the corporation last May that it would only continue coverage if there were changes in policy terms. The changes were unacceptable and coverage expired last September 1.

U.S. asked to clarify computer sales curb

Mr John Boldock, director of the office of administration, said that individual licences, required for advanced systems of potential military value to an enemy, were specific to end-users. A new licence was required if the computer changed hands, even within a country.

Tebbit lobbies for UK contracts in India

BRITISH industry has spent so much time "courting new friends" in Europe that it tended to "ignore some of its old friends" such as India, Mr Norman Tebbit, the Trade and Industry Secretary, said yesterday at the end of a meeting of the Indo-British economic committee.

two countries which amounts to a \$240m balance in Britain's favour on total trade of nearly £1bn. He told Mrs Gandhi that while Britain would do what it could to increase purchases from India she should note that the balance was largely offset by Britain's £110m aid a year and by unqualified remittances sent home by Indians living in the UK.

Foreign car share falls in Italy

IMPORTED cars accounted for a notably reduced share of the Italian car market last year, largely as a result of the success of new models from the Fiat group in their home market.

Sarawak port contract

KUALA LUMPUR — The Kuching Port Authority (KPA) has awarded a French-Malaysian joint venture a 107m ringgit (US\$23m) contract to expand the port near Kuching, capital of Sarawak state on Borneo island, the national news agency reported.

Japan 'to rely less on Australia'

SYDNEY — Australian exports to Japan are expected to stagnate due to a fundamental change in the Japanese economy, according to an Australian Trade Development Council report.

Unfortunately for Australia, the change is generally from commodities which Australia has supplied, that is, away from raw materials including raw energy materials," the report said.

the absence of change in Australia's export structure." According to the report, Australia's share of Japanese imports dropped to 5 per cent in 1981 from 8 per cent in 1970.

Japan 'to rely less on Australia'

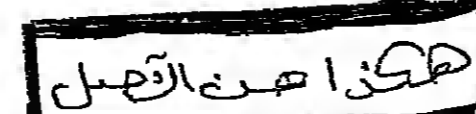
According to a Commerce Department spokesman, who said that re-export from one foreign destination to another included moving equipment from, say London, to Manchester.

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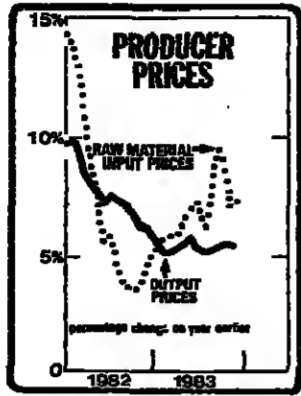


UK NEWS

# Sharp rise in industry's raw material costs

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

THE COST of industry's raw materials rose sharply in December, but the underlying inflationary pressures appear still to be moderate. Figures from the Department of Trade and Industry yesterday showed that manufacturers' fuels and materials costs rose by 3.4 per cent between November and December. However, this surge reflected seasonal factors, mainly the increased marginal cost of electricity as consumption rose. In the 12 months to December the rise was 7.2 per cent, little changed from the 7.1 per cent recorded in November. But the rise in manufacturers' input prices through 1983 was substantially faster than the increase of 4.9 per cent in 1982. This acceleration reflected the sharp fall in sterling in the last two months of 1983 and early last year, as well as some tendency for world commodity prices to rise.



So far manufacturers appear to have been successful in absorbing this accelerated rise in costs. The rate of increase in their selling prices in the year to December 1983 was 5.5 per cent, compared with 6.3 per cent during 1982. Manufacturers have been able to absorb these extra costs while at the same time raising profits substantially. Profits of the company sector as a

whole in 1983 rose by 25 per cent from the low levels of 1982. The year-on-year rate of increase in selling prices has remained remarkably steady at about 5% per cent throughout 1983. This reflects the increased efficiency which has contained companies' annual rates of increase in wage costs per unit of output to about 4 per cent - only about half the underlying rate of increase in average earnings. The steadiness of manufacturers' selling prices is one of the main grounds for the Treasury's optimism that the inflation rate for retail prices will be reduced. Economic Viewpoint, Page 15

# Ford may face strike if foundry closes

By Our Labour Staff

UNION OFFICIALS at Ford's Dagenham complex in Essex are to consider industrial action - which could mean a one-day strike - if the company announces closure of its foundry, which employs 2,000 of the 19,000 workers on the site. Meanwhile, union officials at Vauxhall/Bedford's Dunstable trucks plant have also warned of trouble, including a possible all-out strike, if a man who won an unfair dismissal case after refusing to be part of a closed shop returns to the factory floor.

Ford unions fear that the company will announce closure of the loss-making Dagenham foundry at a meeting on Monday. Shop stewards will meet the following Sunday. Some say a call for a 24-hour strike is likely. Unions also believe that production of a replacement engine for the Sierra car may be switched from Dagenham to Cologne in West Germany, with the loss of up to half the 3,500 jobs at the Dagenham engine plant. Ford has given no indication of this, however.

# Enterprise Oil float hits Amoco snag

BY DOMINIC LAWSON

THE STOCK MARKET valuation of Enterprise Oil, to be floated by the Government later this year, could be adversely affected by a disagreement between Amoco and the Department of Energy.

The argument concerns the Montrose Field, the first oil field to be discovered in the UK sector of the North Sea, in 1980. Amoco have argued to the Department that the southern portion of Montrose is a separate field. The Department rejected Amoco's arguments, which, if accepted, would have yielded extra tax benefits to the Amoco consortium.

The British Gas Corporation had been a member of the consortium, with a 30.8 per cent equity stake. But the stake in Montrose is one of the North Sea oil assets of the BGC transferred to Enterprise Oil.

It is estimated that the southern portion of the field, which Amoco refers to as the Arbroath field, could contain recoverable reserves of 50m barrels of oil. The net asset value to Enterprise Oil of the field could be about £2m, one oil analyst said yesterday.

Amoco will now attempt to persuade the Department of Energy with new evidence, but, if it fails, then it is possible that the disputed area will not be developed.

The recently privatised oil company Britoil has had good news from its exploration well on block 18/13a in the North Sea. The licensee operator, the West German company, Deminor, will announce today that the well has made a discovery of gas condensate. Britoil has a 60 per cent stake in the consortium.

# Pit ban likely to stay

BY DAVID BRINDLE

LEADERS of the National Union of Mineworkers (NUM) look certain today to decide to press on with their 10-week old ban on overtime working imposed in protest at the 5.2 per cent pay offer made by the National Coal Board.

Members of the NUM executive are expected to offer no substantial

support for a call by some members for a national ballot on continuation of the ban, which has cut deeply into earnings. Miners have been losing up to £100 a week in wages, while the board has said it would not mind if the action continued indefinitely because coal stocks are so high.

# British coal industry 'will not supply future EEC market'

BY MAURICE SAMUELSON

THE EEC's coal demand could double by the end of the century but the salvation of the British coal industry does not lie in continental Europe, according to a report published today.

The report, by the House of Lords European Communities Committee, says the key to prosperity will be to raise productivity by expanding efficient capacity and closing uneconomic pits.

The committee, headed by Lord Kearton, former chairman of the British National Oil Corporation, urges the Government to boost the coal industry's morale by writing off many of its losses and treating it in the same way as British Steel and B.I., both state-owned.

The report takes a less sanguine view of UK markets at the end of the century than either the National Coal Board (NCB) or the National Union of Mineworkers (NUM).

The report says the UK would not supply an expanded EEC market, despite its large reserves. This was because the UK could not expand its capacity at the necessary rate and its coal was too expensive.

The committee generally believed UK coal demand in the year 2000 would be unlikely to exceed the current demand of 100m to 120m tonnes a year. Its forecast compares with the NCB's estimate

	GRANTS TO THE NCB (£M)		
	Deficit/operating grants	Social grants	Total
1974-75	46	82	128
1975-76	11	72	72
1976-77	24	43	67
1977-78	24	51	75
1978-79	118	54	172
1979-80	189	62	251
1980-81	175	80	255
1981-82	455	121	576
1982-83*	230	130	360
1983-84**	410	130	540
Total	1,818	825	2,643

\* Estimate  
\*\* Forecast  
Source: Department of Energy

of 113m to 142m tonnes and the NUM's claim that appropriate policies could raise it to at least 170m.

The report says there is a need for a Community-wide policy on meeting social costs of modernisation and financing surplus stocks. Progress was disappointing and decisions and actions could be delayed in longer. Even so, a common EEC coal policy would not transform the prospects for the British coal industry.

The conclusions in the 304-page document are based on evidence taken from witnesses last year. The witnesses included Mr Ian MacGregor, NCB chairman, Sir Nhrman

Siddall, the previous chairman, and Mr Arthur Seargill, president of the NUM.

The committee envisaged reconstructing the board's finances as part of a long-term strategy once it had overcome the difficult problem of closing uneconomic capacity "firmly and humanely."

The committee compared the NCB's accounts with those of British Steel, which had benefited from massive interest waivers and capital reconstruction.

European Community Coal Policy. House of Lords Select Committee on the European Communities (Stationery Office, £13.25).

# Steel unions may set output quotas

BY BRIAN GROOM

STEEL UNIONS are considering imposing "production quotas" on their employers in an attempt to prevent closures and redundancies which they fear will result from the Government's Phoenix 2 scheme to rationalise the engineering steels sector into a single company.

The proposal, yet to be approved by union executives, would mean setting quotas for each works. Unions would refuse to exceed them, and thus prevent production being switched from works which were being run down.

The main union, the Iron and Steel Trades Confederation, has already instructed branches in refuse to work extra shifts if they believe these would involve working on orders transferred from other Phoenix 2 plants.

The Government has yet to publish its plans. The plants involved in engineering steels are GKN's

Brymbo works in North Wales, British Steel's Aldwarke, Templeborough, Tinsley Park and Stocksbridge plants in South Yorkshire, and a BSC works in Wolverhampton.

They also include Hadfields in Sheffield, which is due to close in March with the loss of 700 jobs. However, unions have virtually abandoned the fight against this closure after a poorly-attended mass meeting last Sunday.

The next step in the unions' battle against closure in the rest of engineering steels will be a conference of steel workers from North Wales, South Yorkshire and the West Midlands to be held in Sheffield on February 18.

This will involve coal and rail unions as well as local trades councils, and all the Labour MPs from Sheffield, Rotherham, Wrexham and Wolverhampton.

# Train fault may hinder Singapore metro bid

BY HAZEL DUFFY, TRANSPORT CORRESPONDENT

PROSPECTS for Metro-Cammell's bid to build railcars for the new Singapore metro could be damaged by London Transport's discovery that a batch of new underground carriages built for it by the company exceed the specified width.

The error has been found in nine carriages designed for LT's Jubilee Line. Mr Tony Sansome, chairman of Metro-Cammell, which is based in Birmingham, said yesterday: "There was a small manufacturing tolerance error on the first nine cars which is being corrected."

Metro-Cammell has agreed to pay the cost of rectifying the fault, which has resulted in some cars being up to 10mm wider than specified. Metro-Cammell guarantees an engineering tolerance deviation within 5mm. The rectification will be carried out at "minimal cost" and will probably be done at one of LT's engineering works.

LT says that it has taken delivery of cars that have been out of gauge before and that rolling stock can often have minor faults. The embarrassment for Metro-Cammell, however, is that the fault was not discovered until the cars were on commissioning trials with LT, and that the design is new.

The error has come to light when the company's bid for the Singapore contract, valued at more than £60m, is being evaluated against bids from North American, Japanese, and continental European railcar manufacturers. The Singapore Mass Transit Authority is expected to announce the successful bidder on April 9.

LT emphasised yesterday that it is satisfied with the standard of workmanship on Metro-Cammell equipment. The company has been virtually the exclusive supplier of LT rolling stock for the past 15-20 years, but LT is evaluating tenders for the prototype replacement of its Central Line trains from companies including CHPT of France and Waggon-Union of West Germany, in addition to Metro-Cammell.

The faulty Jubilee Line cars are part of a 90-car order worth £33.7m to be completed by the middle of next year.

The company is anxious to secure export orders to fill in the gap between completion of the Jubilee Line order and the next LT replacement programme.

# BT to make low-cost telephone receivers

BY GUY DE JONQUERES

BRITISH TELECOM (BT) will signal its entry into equipment manufacturing when it launches a low-cost telephone receiver next week. It will be the first retail product the state telecommunications group has designed and made entirely by itself.

Until now, BT has relied almost entirely on outside manufacturers such as GEC, Plessey, and Standard Telephones and Cables to make equipment for it. Its move into manufacturing is a further assertion of its commercial independence ahead of privatisation, planned for next autumn.

The telephone, a one-piece push-button instrument called the Slimline, will sell for £29.95 (about \$42). It will be the least expensive telephone in BT's range.

It will be made by BT at a plant in Cwmarn, South Wales. The

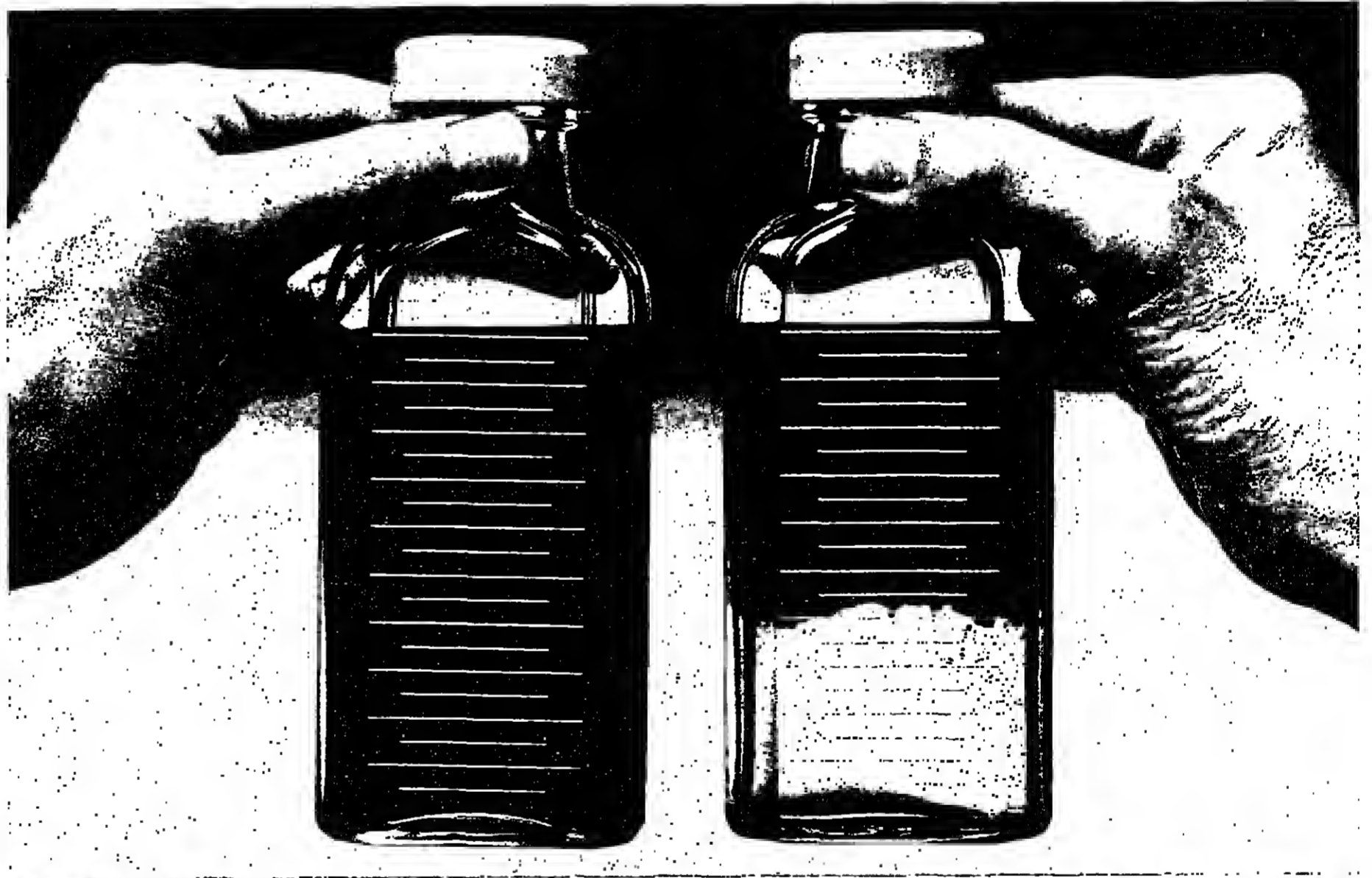
plant is one of half a dozen BT factories, which are mainly involved in production engineering and repairing and maintaining equipment already in service.

Alison Hogan writes: British Telecom yesterday named Cazenove as its stockbroker to advise BT on its privatisation. The company also informed Greenwell, another London broker, that "it can expect to advise BT from time to time."

Cazenove and S. G. Warburg, merchant bankers to the company, will advise BT on its conversion into a public limited company.

The British Government announced on Tuesday that Hoare Govett and Kleinwort Benson would advise the Department of Trade and Industry on the BT sale as lead stockbroker and merchant bank respectively.

# Getting oil out of Britain's waters isn't our business.



# Getting water out of Britain's oil certainly is.

Anyone who thinks oil and water don't mix should try exploring for oil. Only 10% of the crude oil that comes out of the North Sea is clean. The rest being a corrosive cocktail capable of bringing a pipeline to a grinding halt. Fortunately, it's the kind of problem a chemical company with our resources can take in its stride. By developing special demulsifiers, we've managed to separate the oil from water and impurities. Thus saving the oil companies a small fortune in transport and refining costs. You may think it sounds all very

simple but it isn't. Each crude oil type requires a specific demulsifier combination. We don't mind getting our white coats dirty either. Any new demulsifier we develop is tested in the field by our own engineers. Not only in the North Sea but in oilfields around the world. Getting oil out of rock. It's one thing to separate oil from water, but quite another to separate oil from rock. Until recently, over 70% of the world's oil was retained in porous rock beneath the drilling areas.

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## UK NEWS

## Yard workers would end demarcations to save Britoil order

BY MARK MEREDITH, SCOTTISH CORRESPONDENT

THE WORKFORCE at the Scott Lithgow shipyard on the Lower Clyde voted yesterday to accept any agreement on new working practices if British Shipbuilders would guarantee the future of the yard and renegotiate the £88m oil rig contract cancelled last month by Britoil.

But it could be too late to save the 4,250 jobs at the yard which faces near certain closure in light of the cancellation. However welcome the attitude on flexible working - a key demand by British Shipbuilders - the management is understood to be reluctant to undertake any commitment to maintain the yard with its poor record of late deliveries and heavy losses.

Scott Lithgow workers have asked for a meeting with Mr Graham Day, chairman of British Shipbuilders, for next Tuesday in Newcastle. Mr Day has repeatedly refused to renegotiate the Britoil contract which was two years behind schedule in construction.

It was also learned yesterday that BP has asked to see Mr Day to discuss the future of their £56m contract with Scott Lithgow which is nearing completion, but has run past its final deadline for delivery.

In negotiations which started before Christmas, Scott Lithgow has pressed for an extension of the final

deadline due to circumstances it says were beyond its control.

The yard has been building complex semi-submersible drilling rigs which led to severe problems adjusting from the demands of shipbuilding to those of the offshore oil industry.

Management plans for possibly more than 600 layoffs at Scott Lithgow have been put off until the trade unions see Mr Day next week. After yesterday's meeting Mr Duncan McNeil, the works convenor, said there was no limit to the undertakings which the unions were ready to accept to save the yard.

"We are ready to give specific commitments to meet the needs of the offshore industry, but in return we must have a commitment from British Shipbuilders that they are prepared to continue this facility and renegotiate the Britoil contract," he said.

Unions were even ready to accept arrangements under which various trades would do each others work. This has been the sticking point in flexibility talks so far with steel-makers and outworkers refusing to take on each other's functions.

The Britoil contract is now before the courts with Scott Lithgow challenging Britoil's rejection of their claims that the contract could still be completed by early 1985.

## Company status for state arms factories

By Lynton McLain

ROYAL ORDNANCE Factories (ROF), which supply weapons and equipment to the British armed services, are to be split into four trading companies before the sale of its assets to the private sector.

The divisions will cover ammunition, small arms, fighting vehicles and weapons and rocket motors.

Mr John Lee, under-secretary for defence procurement, said yesterday that the Government had an open mind on the form privatisation might take.

More than 18,000 workers at the 11 ROF plants throughout Britain are preparing for a one-day national strike on Monday of next week. They are opposed to the privatisation plans.

The walk-out will coincide with the second reading of the Ordnance Factories and Military Services Bill in the House of Commons. The Bill allows for the change in status of the ROFs.

Private sector companies with interests complementary to those of the ROFs include United Scientific Holdings, Vickers, and GKN in fighting vehicles; Sterling Armaments in small arms and British Aerospace and Hunting Engineering in weapons and rockets.

## SDP to consider European Assembly selection methods

BY PETER RIDDELL, POLITICAL EDITOR

LEADERS of the Social Democratic Party will take decisions this weekend in Birmingham which will have major implications for the development of the SDP/Liberal Alliance.

The immediate question is how candidates should be picked for the European Assembly elections in June. But this issue is essentially symbolic of widely differing views of the relations between the two partners in the Alliance.

On the one side, is Dr David Owen who believes that the SDP should develop separately, admittedly in a confined and close alliance with the Liberals, but as a distinct entity and potential coalition partner.

On the other side are the majority of Liberals and a significant minority of the SDP, particularly those closely associated with Mr Roy Jenkins, the former leader. They believe that the two parties must come closer together - convergence is the vogue term - or else, inevitably, fall apart.

On their view, local SDP and Liberal parties should be allowed jointly to select Euro-candidates if they so wish as a natural step towards convergence. In contrast, Dr Owen argues that joint selection would compromise the identity of the SDP and would mean, for instance, that the two parties would be regarded as one inside parliament.

The SDP's national committee last month voted to approve joint selection in two constituencies -

Durham and Tyne and Wear - despite the opposition of Dr Owen. He has since made no secret of his disagreement or of his concern about apparent drift over the issue within the SDP.

The question has come up again over Cambridgeshire in the east of England where the local SDP area party has voted for joint selection of a candidate. This is despite a decision against joint selection by the Council for Social Democracy, the party's 400 strong ruling body, at its last meeting in Salford near Manchester last September. The Council meeting this weekend in Birmingham will be preceded by a discussion on joint selection by the party's national committee tomorrow evening.

He told the conference that there would be a further development of strategies to enable the Lloyd's market to function more efficiently. Mr Davison said that the market was in better shape after the upheavals of the previous two years. The

number of members of Lloyd's whose private wealth is pledged as an investment in the market and allows it to function, now stands at 23,500. The membership has trebled in the past ten years.

Together the wealth of our names (the members) and our technical reserves amount to a total backing of \$16bn against a gross premium income for 1983 of about \$5bn. It follows that, whatever problems Lloyd's may have had in the last year or so, the growth of business and the security of our policies are not among them."

Mr Davison added that the new governing machinery at Lloyd's had created a new law-making machinery "and that has properly highlighted shameful practices within the market - practices which Lloyd's has amply demonstrated it is not prepared to tolerate."

## Tea prices to rise by further 10%

BY RICHARD MOONEY

SOARING WORLD prices have forced Brooke Bond Oxo, Britain's leading tea company, to announce its second price rise in six weeks.

By early next month the shop price for a 125 gram packet of PG Tips, the country's biggest selling brand, is likely to rise a further 4p to about 42p. PG tea bags will go up from 96p to about 99p for a box of 80. A month ago PG Tips cost 35p a packet.

Wholesale price rises of 19 per cent for packet teas and 11.5 per cent for bags effective from next Monday should take a few weeks to work through to the shops.

The average price for tea sold at Monday's London auction was 314.86p a kilo, the London Tea Brokers' Association announced yesterday. This means the average price has trebled since last April. If auction prices hold at current levels, or rise still further, more retail price rises seem inevitable.

Tea consumption has been rising faster than production, especially in India. Last month the Indian Government announced that it had suspended exports of CTC tea, the main grade used in blending, to prevent a domestic shortage and reduce prices. Since that announcement the London auction average has risen by 63p a kilo.

## Lloyd's to bring in further rules to curb market abuses

BY JOHN MOORE, CITY CORRESPONDENT

MORE RULES to regulate the Lloyd's insurance market to curb abuses by the market's professionals are to be introduced this year, Mr Ian Hay Davison, Lloyd's chief executive, said in New York yesterday.

Speaking at a conference sponsored by the Insurance Services Offices and Insurance Information Institute, Mr Davison said that Lloyd's was concerned to resolve the difficulties surrounding the scandals of the past two years. New rules would be introduced to regulate the market, which he said could prove the largest task this year.

He told the conference that there would be a further development of strategies to enable the Lloyd's market to function more efficiently. Mr Davison said that the market was in better shape after the upheavals of the previous two years. The

## High Court delays anti-trust action

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

THE HIGH COURT in London has ruled that Dr Maurice Bloch, a drugs research clinician, cannot go ahead, for the time being, with his anti-trust action in the U.S. against two companies in the SmithKline group.

Mr Justice Drake held yesterday that the anti-trust case was covered by a temporary High Court injunction which stopped Dr Bloch suing the companies in the U.S.

The injunction had been granted in respect of a \$160m damages claim begun by Dr Bloch in the U.S. The judge said it did not refer expressly to the anti-trust claim but it did cover "any other claim... in respect of a licensing agreement made between him and SmithKline."

The anti-trust complaint referred to that agreement. In 1974, Dr Bloch licensed SmithKline and French Laboratories, a British company, to exploit worldwide a drug he had invented for treating stomach complaints.

In 1980 the company decided that the drug was unlikely to be a success and ended the licence agreement. Dr Bloch sued the company and its American parent, SmithKline Corporation, in the U.S.

In November 1981, the High Court granted the temporary injunction to stop Dr Bloch proceeding with that action. The Court of Appeal upheld the order, ruling that the licensing agreement had been made between English parties and that any dispute should be tried in England.

Mr Justice Drake also refused to vary the injunction on the basis of an undertaking by Dr Bloch to amend the anti-trust claim. To do so, the judge said, would be a gross interference with the jurisdiction of the U.S. courts, which would be entitled to feel angry at what they could regard as an interference with their right to regulate proceedings before them.

The judge said it was not correct to say that the injunction deprived Dr Bloch of his ability to pursue his U.S. claim. It only delayed that claim.

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## City venture capital backs robot company

BY DAVID FISHLICK, SCIENCE EDITOR

THE CITY of London is putting up nearly £300,000 to help researchers at Oxford University start a company to make second-generation "intelligent" robots.

The company, Meta Machines, will be run by Mr Peter Davey, the engineer who heads the Government's £2m-a-year robotics research programme managed by the Science and Engineering Research Council, to which industry contributes.

Its first product will be one of the most advanced developments in this programme, an intelligent arc-welding system. Financial support for the development, carried out in the engineering laboratories at Oxford, has come from GEC, BL, and Fairley Automation.

Finance for Meta Machines has been arranged by Baronessmead Associates, a City venture capital company. The main investors are the 1983-84 Baronessmead Expansion Scheme Fund, Newmarket (Venture Capital) - one of N. M. Rothschild's funds - and Oxford University.

The company's products will be robots programmed with an understanding of the process to be automated. The first, called Meta Torch, will be applicable to the kind of arc-welding operations used in the car assembly industry.

The idea is that a robot welder will be able to make reliable joints in thin sheet metal even when the positions of the edges to be joined are not accurately known beforehand.

The key technology lies in the sensor, which consists of a laser and a miniature television camera - effectively, the "eye" of the robot - packed into a small cylinder round the welding torch.

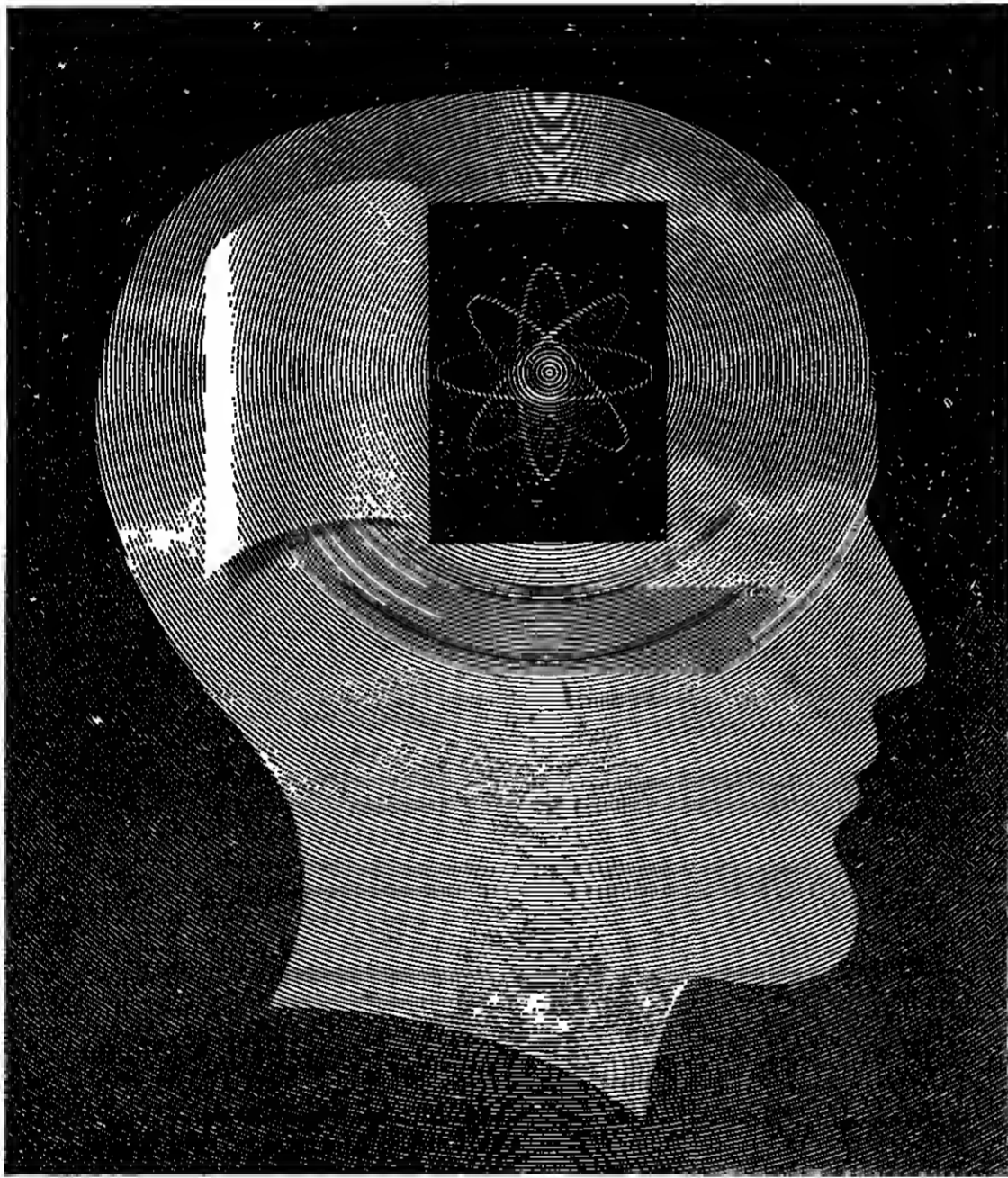
Mr Davey says Meta Machines will concentrate on the high-technology features of robotic systems for a wide range of processes, not only in the engineering industries. He foresees attractive openings in profitable industries not generally associated with robotics, including pharmaceuticals, cosmetics and packaging industries.

The company has no direct competitor in the UK, but will be competing with Automatrix in the U.S. It hopes to be installed in a new factory near Abingdon, Oxfordshire, in the spring.

BT claims that this new link between Lorton and Milton Keynes, Bedfordshire, is a world first in the application of single-mode optical fibres. The world's first commercial use of single-mode transmission was started by Continental Telephone in New York, last September with a system built by ITT.

The BT link, however, uses a faster rate of data transmission which means each fibre can carry more telephone calls. Mr Jim Hodgson, vice-chairman of BT said yesterday: "This historic achievement confirms the lead that British Telecom and British industry have in optical fibre technology. Nearly all our future long-distance cable links will employ single-mode fibre, resulting in better quality transmission and reducing capital and operating costs."

The BT link is 17 miles and the signal requires no intermediate boosting, and was supplied by Standard Telephone and Cables. Initially, it will use two pairs of fibre, each capable of carrying nearly 2,000 simultaneous telephone calls.



## Innovative financial thinking comes from meeting the challenge head on.

Today's complex marketplaces demand a constant search for new ways to meet tough financial challenges.

We can help. The Royal Bank has some of banking's best financial minds to provide you with the kind of imaginative thinking difficult times demand.

### MERCHANT BANKING

For example, the challenges of tailoring a package to specific client needs and obtaining the best terms

available in the market led Orion Royal to develop the world's first floating rate deposit note.

Combining the characteristics of a money market instrument with those of a securities issue took innovative minds and a lot of creative thinking. The outcome was a highly successful placement.

### COMPETITIVE EDGE

The same kind of thinking also led to the invention of the multiple tranche Eurobond issue and

arranged the first "hedged currency" bond issue. When Royal Bankers meet a challenge head on, clients can get a competitive edge.

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Assets: U.S. \$22 billion. Services: more than 1500 from his worldwide. 200 operating units in 26 countries. 41 subsidiaries and affiliates. 9000 employees. Head office: Toronto, Ontario, Canada. Branches: London, Paris, Brussels, Geneva, Frankfurt, Hamburg, Düsseldorf, Dortmund, Madrid, Rome, Milan, Buenos Aires, Santiago, Chile.

مركز خدمات العملاء

THE ARTS

ring in to abuses

Softcops/The Pit

Michael Coveney

Caryl Churchill's strange, ethereal new play for the RSC is based on the supposition that acts of political subversion are glorified and then isolated by society as "crimes".

Looking up, the audience notices the Medici String Quartet who begin to play a mellifluous andante composed by Nigel Hess. The stage is awash with white drapes and mirrors.

The idea that the cop and the robber are an invention of a politically repressive society is criticised by Miss Churchill in the middle sections where the French criminal (turned chief of police, Vidocq (Geoffrey Freshwater), tracks down, and then enters into a showbiz colusion with the renowned Lacenaire (Malcolm Story).

Howard Davies's production is clean, crisp and rather similar to his work on Good. The play really is a series of dazzling fragments and resembles in technique a play Miss Churchill wrote before Cloud Nine and Top Girls, Traps. She remains an intriguing experimentalist.

The quartet plays during much of the action, creating a magical pizzicati background



Malcolm Story (foreground)

for the scene of regimented classroom mime and a robust Sullivan-ish accompaniment for Lacenaire's banned song. The writing is at its nimblest with Vidocq's sleight of hand demonstration of the deterrent value of punishment ("knowing that you're going to get it" is what counts) and the candlelit truce of two conspirators sounding each other out.

of a Minister (John Carlisle) for old-fashioned methods of torture. Playing for 90 minutes without an interval, Softcops doesn't really add up as a play, but should fit the bill for the RSC's "Thoughtcrimes" festival which begins next week.

I am not quite sure how audiences are supposed to respond to this 1984 fest in the Barbican's concrete bunker. Visiting the place in itself is a chastening political experience.

Haydn & Schumann/Barbican Hall

Dominic Gill

To commemorate, presumably, the 175th anniversary of the death of Haydn in 1806 — these days anniversarists will seize on almost anything that goes in 25s — and more eccentrically, the 175th anniversary of the birth of Schumann the following year, the BBC Symphony Orchestra are playing those two composers and night at the Barbican all this week (a burden lightened only by two appearances of the Lindsay String Quartet).

of a burden. Under the decent, cultivated, humourless and curiously ungrasping direction of their principal conductor John Pritchard, the orchestra's account of Haydn's wonderful E flat symphony No 103 barely raised its head from under the weight of the notes. Technically it was more ragged, and far less finely shaped, than anyone could wish.

Cécile Ousset, whose playing I love so often in the most greatly admired, seems to be having difficulty these days in recapturing her best form. Her Schumann piano concerto on this occasion was a disappoint-

ment, dull-toned, heavy-handed, without any real flights of fancy. Presumably such a heavy weather choice of tempo for the finale, deliberate to the point of ponderousness, was Pritchard's and not her own? The programme ended with Schumann's Spring symphony, directed and played as if to illustrate a casual springtime stroll whose greatest excitement was a certain jauntness. One year ago on the same day almost certainly in vain, when orchestras manage somehow to organise their lives, and their conductors, to give half as many concerts, twice as well.

Triple bill/Sadler's Wells

Clement Crisp

A chance to see David Bintley's Choros again on Tuesday night confirmed the fine impression it made at its first performance in September. It is the work of an assured classicist craftsman, having the kind of energy and delight in its own language that speak of a still young creator, and it offers exhilarating challenges to its interpreters.

These on Tuesday were largely different from the first cast, and certain of the brightest edges of the dance seemed momentarily blunted. But the merits of the piece were well presented, and Derek Purnell was

notably good in the quartet that suggests a mysterious gloss on Apollo, while Susan Crow was beautifully expressive in the brief flashes of emotion—the little hints of flirtation and sexual rivalry.

Choros opened the programme, and it was followed by Lo Boutique Fantaque. Heaven and Leonid Massine decreed that this should be the ideal "closing" ballet, and it looked a thin filling to the evening's sandwich, with not enough of Massine's own spicy vivacity and clear physical definition to the action. I thought Karen Donovan and Michael O'Hara, fine as the Tarantella dancers—

sharp in accents, and charming—and Graham Lustig has the dapper verve that the male Can-can dancer demands. Elsewhere the performance had the slightly time-worn air of the front-cloth.

As a second closing ballet, Elite Symphonies, done with ready smiles and nimble feet, and Evelyn Hart as an elegant and completely natural guest in the Stop-Time Rag and the Bethena waltz, Alain Dubreuil her sterling partner. Miss Hart has beautiful line and a sense of fun, which is what the dances need. The rest of the company enjoyed themselves and so, clearly, did the audience.

Treasured Possessions/Sotheby's

Antony Thorncroft

The fruits of fortune



A family portrait by Zoffany, from Rockingham Castle

The range in house is wide, stretching from the grand Ducal palaces at Arundel and Blair to comfortable manor houses like Norton Conyers, home to the Grahams since its Jacobean construction, and Fursdon House in Devon, occupied by a male line of Fursdons that has remained unbroken for over 700 years.

The house owners have, in the main, sent manageable treasures. There is little from a dramatic self-portrait of the Neapolitan artist Giordano, and a Zuccarelli landscape, but much which reflects their family, their estate, and hunting.

There is a remarkable painting, probably by the owner, Sir Francis Popham, of Littlecote in Berkshire in 1705 which shows off all the activities of the estate—forestry and hunting, ploughing and visiting—set against the house. The family portraits range from a charming Zoffany conversation piece to the Duke of Norfolk's frightening portrait of his 16th century ancestor, the 3rd Duke, who just survived the block which claimed his two nieces, the Queens Anne Boleyn and Catherine Howard, through the death of Henry VIII the day before the execution.

It is a surprise to see a Tisotto, revealing that at least one land owner, in this case

There are works by Reynolds, and Lely (a good one) there is a Rubens sketch which developed into his Banqueting House ceiling, and a Bacon, but it is the curiosities which give the display its appeal. A Burmese elephant stud book; a mummy, which was found in 1971 to have retained its contents; an early version of Skeeter's Ennui, a statuette which must often have oppressed the younger generation on wet afternoons. It is also a shock to see a Henry Moore (from Saltwood Castle in Kent).

It is odd that the rich and the privileged should generate an much public sympathy. But then it is their oddities which make them worth preserving. The great attractions in the exhibition are the weird portrait of Sir Thomas Coningsby with his dwarf; Thomas Skelton, the fool of Muncaster, looking suitably lunatic; the extraordinary shell shaped bed which rests at Stone Park.

There is also a strong feeling of historical continuity and what might have been, particularly in the portrait of Prince Henry, the eldest son of James I who could have avoided all the disasters of the 17th century had he lived to succeed; he certainly seems a bright two year old. So all in all the display is a peep into some very interesting front windows.

Foolfire/Riverside

Martin Hoyle

The London International Mime Festival got under way on Tuesday night with a likeable American trio. For the next four weeks, in such locales as the ICA, the Cockpit and the Shaw, familiar experts like Nola Rae, the Fratellini and the Moving Picture Mime Show can be sampled with punk mime Johnny Melville, Théâtre de l'Atelier with the play written for them by Peter Handke, no less (My Foot My Tutor), and Enoch Rosen whose Marceau-inspired traditional mime has featured in the Eurovision Song Contest, which

sounds a definite step in the right direction given the usual run of lyrics.

The opening show exploits the talents of a trio who he expect from an evening of music training, a run in the lead of Borna, and teaching experience at a Clown College and the ClownShop and Antic Arts Academy, Purchase, NY.

The entertainment is more choreographed than one might expect from an evening of clowning. A modern dance routine when the performers, dressed as pilots, glide round with rubbery inflated aeroplanes

takes on a surreal edge as the aircraft meet, embrace, dance together and, jilted, deflate. It might have lived up to Dancin'.

Similarly, the finale where, stripped to the waist, Michael Moschen and Fred Garbo twirl flaming torches to a disco beat would not be out of place in cabaret; and is no less enjoyable for that.

More traditionally, Mr Moschen's gently moving hands apparently suspend crystal balls immobile in mid-air; and the children love Mr Garbo's efforts to master the unicycle which, though manful, nearly leave

him painfully less so.

Bob Berkly's gawdily avian birdwatcher is a tour de force as his hands become fowls feeding, pecking, bullying and eventually carrying him off. Mr Berkly also involves hapless audience members in a routine that entails communicating by means of what sound like rude cousins of the kazoo.

The evening also includes some masterful juggling with Indian clubs; in fact it's a painless and varied introduction to mime for those who feel the rarefied art to be more ridiculous than precious.

'Jean Seberg' to leave National

The National Theatre has announced that the musical drama Jean Seberg is to have its last performance at the National on April 4, just months after joining the Olivier repertoire. It played to packed previews but since the Press opening and a disappointing reception by the critics the production has drawn only half to two-thirds full house, which is not considered enough to sustain a run beyond April.

It is also announced that Thomas Orway's Venice Preserved and George Orwell's Animal Farm are to be staged at the National Theatre. The former opens in the Lyttelton on April 12 while Michael Mellan makes his first appearance on the South Bank as Pierre.

Animal Farm, adapted and directed by Peter Hall, opens in the Cottesloe in April.

Guys and Dolls is to return this year, as promised, and re-opens on April 11 in the Olivier repertoire, where it will play for about three months before transferring to the West End.

Sponsorship of 'Figaro' at Glyndebourne

The Glyndebourne revival this year of Sir Peter Hall's production of Mozart's Le nozze di Figaro is made possible by sponsorships from the Michael and Ise Katz Charitable Trust. The revival opens the Glyndebourne Festival on May 22, the same months after joining the Glyndebourne repertoire. The Glyndebourne launched its first Festival 50 years before.

The production, to be conducted by Bernard Haitink, will be given 16 performances by Glyndebourne Festival Opera and 12 by Glyndebourne Touring Opera.

Mr and Mrs Michael Katz are long-standing supporters of Glyndebourne



Foolfire: a likeable American trio—part of the London International Mime Festival

Arts Guide

Music/Monday, Opera and Ballet/Tuesday, Theatre/Wednesday, Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

January 6-12

Exhibitions

NEW YORK

Contour Sculpture Centre: Set against a spectacular view of New York atop the World Trade Tower, 35 Rodin sculptures are displayed in the enlargements and reductions carried out by Rodin collaborator and reproducer Henri Lebosse. One World Trade Center, 195th street.

Wileen de Kooning (Whitney): This major retrospective with 350 works covering the artist's entire career is divided into drawing and painting and sculpture sections. Half the exhibits are drawings and there are 25 sculptures. Ends Feb 19.

Kandinsky (Guggenheim): More than 300 works limited to the early Russian and middle Bauhaus periods from 1915 to 1933 is the second in the museum's comprehensive retrospective of Kandinsky's peripatetic and prolific career. Also included in the show are works of contemporaries including constructivists like Malevich and Lisitzky as well as German and Bauhaus artists like Moholy-Nagy, Hans Der Robe and Paul Klee. Ends Feb 12.

WASHINGTON

National Gallery Art of Aztec Mexico combines works confiscated during the Spanish conquest of 1521 with the unscrupling in 1778 of the Great Temple of Tenochtitlan, capital of the Aztec empire, in central Mexico City. The most comprehensive Aztec

art exhibit ever mounted in America reflects the religion that gods reflected the Aztec culture, with gods performing sacrifices that had to be repeated by man in order to keep the sun moving across the sky and the cosmos working. Ends Jan 8. Hirshhorn: 136 works by 62 European and American 20th century artists illustrate the contemporary theme of Dreams and Nightmares for Society. Timed to usher in Orwell's dreaded 1984, the exhibit runs the gamut of artists from Russian constructivists with their misguided dreams to a large sampling of American and German artists affected by the century's wars. Ends Feb 12. Leonardo's Last Supper (National Gallery): Although the refectory of the Church of Santa Maria della Grazie has not been brought from Milan, this clever exhibit does the next best thing in combining preparatory studies drawn from the Queen's collection in Windsor Castle with photos and a film of the restoration of works done after the Last Supper, including a series by Rembrandt. Ends March 4.

CHICAGO

Museum of Contemporary Art: 46 paintings of Surrealist Malcolm Morley trace the British-born painter's style from his origins in abstract works through Pop art to the ocean liners based on postcards that show the photo-realistic influence of his self-styled Surrealism. Organised originally by the Whitechapel Gallery in London, the show includes recent pastoral landscapes with beach scenes and animals. Ends Jan 22.

WEST GERMANY

Berlin, Akademie der Künste, 10 Hansastrasse: Designs, furniture, drawings and publications by Adolf Loos, the Austrian architect and master craftsman (1870 to 1933). Ends Jan 15.

Bremen, Kunsthalle, 297 Am Wall: A survey of the work of Odilon Redon (1840 to 1916), the French symbolist painter. It comprises 200 oil paintings, pastels, drawings and graphics. Ends Jan 22.

Hannover, Kestner Gesellschaft, 16 Warmbüchelstrasse: Expressive paintings and coloured bronze sculptures by Sandro Chia, created by the Italian "youth" artists between 1976 and 1983. Ends Jan 22.

Düsseldorf, Städtische Kunsthalde, 4 Grabbeplatz: Picasso sculpture. The 197 pieces — made of wood, plaster, bronze, wire wrapping and rolled iron sheets — span all periods. Ends Jan 29.

Münster, Hans der Kunst, 1 Priester-gassestrasse: The museum is showing Christy Heckel's early work. There are paintings, drawings and watercolours. Ends Feb 2.

Bonn: Rheinisches Landesmuseum: The most comprehensive exhibition of contemporary U.S. art ever shown in West Germany. It features works from the 1970s and 1980s by nearly 50 artists representing such styles as pattern and decoration,

new image, new wave, new expressionism and graffiti. Ends Jan 15. Frankfurt, Södel, 63, Schumacherstrasse: The centenary of Max Beckmann, the outstanding German expressionist, is marked by 180 works from 1915 to 1933. Ends Feb 2.

HOLLAND

Irish Culture from 3000 BC to 1500 AD in Amsterdam's Rijksmuseum until Feb 26. The Book of Kells, the most magnificent illuminated version of the gospels in Europe, is joined by a hoard of bronze, silver and gold treasures, all finely wrought and many of them encrusted with jewels — a reminder that long before its present troubles, Ireland had its golden age and was the last repository of Western art and learning to fall to the Vikings.

LONDON

The Hayward Gallery: Harold Dury — a timely reminder that this hero of countless chocolate boxes and postcards, the acceptable face of modern art, was not only a significant painter but a Fauvist of peculiar character, a follower but not slave of Matisse, who later developed into a decorative artist of the first importance. His elegantly perfunctory notation, and his characteristic imagery — white sails in the bay, palm trees below the balcony, bright silks against the apple green of the racecourse, have been taken up and broadcast endlessly by lesser talents. Ends Feb 5. The Hayward Gallery: Hockney's Photographs — a brisk survey of Hock-

ney's practical use of the camera from simple reference and aide memoire to photographic exercises. This latter aspect developed slowly but has speeded considerably in the past 18 months. The composite photographic image is no longer just a simple still life or portrait study, but a strange and intriguing action of an event, a sequence of images, a passage of time. Ends Feb 5.

PARIS

Raphael: Three exhibitions pay homage to the great Renaissance painter — born 500 years ago. The Grand Palais assembles, for the first time, most of the paintings and drawings from French museums, among them Le Petit Saint Georges, La Belle Jardinière and Balhazar Castiglione's portrait. Another exhibition shows Raphael's influence on French art from the 16th century to the present. Grand Palais (M15/M16). Closed Tue, Wed (late closing). Ends Feb 12. The Louvre completes the anniversary celebrations with an exhibition of the most brilliant of Raphael's collaborators, among them Giulio Romano, and of his disciples. Louvre, Cabinet Des Dessins (260/3926). Closed Tue. Ends end of Feb.

Balthus: In collaboration with the Metropolitan Museum 50 paintings and as many drawings are shown in the secretive painter's first retrospective revealing a universe peopled with adolescent girls and cats in an atmosphere of troubling languor. Centre Georges Pompidou. Closed Tue. Ends Jan 23 (277 1233).

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# THE MANAGEMENT PAGE: Marketing

## Propaganda pays off

Feona McEwan on public service advertising

SO, WHAT was the Government doing on British television during the holiday period? It was doing what it does every December, bringing us one of the most disturbing campaigns of the year.

Few television viewers over Christmas and the New Year can have missed the sobering drink/drive ads. There they were, the seasonal regulars, squashed between the summer break Sharp, 10-second bursts drove home the point about drinking and driving.

But this was just one of some 80 campaigns spawned each year by the Central Office of Information on behalf of HM Government which, with a total annual budget of some £20m, ranks as the sixth largest advertiser in the UK, according to Campaign's ratings for 1983. Of this total, £20m is spent through the COI.

Alongside fellow big spenders, the COI stands apart, a marketing machine of a different ilk. Unlike Kellogg's, Unilever and Mars whose business is cereals, soap powders and sweets, it trades in non-political government information of the social and welfare kind. It works for all government departments in its capacity as a common service agency and its campaigns cover everything from crime to robotics at a cost of anything from £20,000 to over £1m.

Every agency wants a COI account. It's a blue chip seal of approval, says one. There are 15 of the chosen few, from multinationals like Walter Thompson, and Ogilvy and Mather, to newcomers like four-year-old Wight Collins Rutherford Scott. "It's horses for courses: some agencies are good on television, others at technology," says a COI spokesman. "Though we take for granted a first class creative product." Agencies are selected through an advisory committee made up of seven outsiders (marketing and media specialists) on a three year rota. The current chairman is Birds Eye's marketing manager, Keith Jacobs.

The drink-drive campaign—done by Waseys (now Lowe Howard-Spink Campbell-Ewald)—has been a hardy annual since the mid-1970s when the casualty rate (which had dropped in the wake of the breathalyser introduced in 1967) began to climb again. At that time a government committee concluded that it wasn't the law that should be changed but people's awareness of the problem.

Since 1976 Waseys (as it was then known) has devised an annual campaign—remember "Think before you drink before you drive"—for Christmas,



Historically this was thought to be the time when drink-related accidents were high.

In truth, the problem is a year-round one, peaking in spring. The Department of Transport estimates, from statistical sampling of coroners' reports, that of drivers killed in road accidents in 1982 one in three was over the blood alcohol limit.

The 1983 campaign, which began on December 5 and ended on January 1 1984, was a reworking of the familiar themes of consequences and punishment. There were two ads; one stressed the potential severity of the penalty featuring press reports of prosecutions, and the other, by listing real names of casualties, sought to bring home the severity of the offence. The target group, as always, was the C2 20 to 34-year-old male, the most likely offender, and the 10-second ads were concentrated strategically in early evening pre-pub-viewing hours.

Previous campaigns had used two strategic approaches. One was that this target group, according to research, was most likely to respond to suggestions that their girlfriends might get

burt, rather than they themselves—"what me? I'm immortal." The second strand, much used in the late 1970s, focused on deterrents.

The 1981 Transport Act, which came into force in May last year, has enabled police to tighten up their procedures. Improved technology in the form of the new Evidential Breath Testing Machine (not to be confused with the bag and pipe roadside breathalyser) now available to some 700 police stations, has given the police speedier, more accurate, evidence on the spot.

The 1983 campaign, which cost £980,000, was thus based on the assumption that police would be even more vigilant, as well as capitalising on the real worry of drinking motorists of getting caught.

Results of the drink/drive campaign are extremely complex to analyse, although the Government is set to answer parliamentary questions on Monday. Casualty rates tend to be the most accessible gauge, according to the Department of Transport, but coroners' reports take months to come through. A number of related factors, such as weather conditions and

vehicle improvements, as well as media comment police campaigns, and Royal Society of Prevention of Accidents publicity, make it extremely hard to assess effectiveness of the advertising alone.

However, the Department of Transport admits that it probably has "a limiting effect" and there is considerable anecdotal evidence "which can not be ignored" to suggest that synergy of the advertising campaign and police vigilance has paid off.

By contrast, the Small Business campaign, run last March at a cost of £1.1m, was simple to gauge. A press coupon and Freephone telephone number given in the ads made it possible to calculate the exact response. What set out to be a 12 week campaign and anticipated about 60,000 replies, was cut short just seven weeks later when 140,000 people had responded.

The campaign set out to inform small business owners, managers and the professional intermediaries who guide them (bankers, accountants) of the various beneficial government schemes available. There are 86 in all, most of which were felt to be unknown to the target market.

It was thought that the target group was difficult to stir in any way. "We discovered a lot of small businessmen had hostile attitudes to the government and were cynical about its help," says Mike Davis of WCRS.

"Because of that our strategy was aimed at seeing government as a resource rather than a giver of help, putting the businessman in the active role of taking from the Government."

Individual schemes were not named since there were so many, the idea was simply to point businessmen in the right direction. The campaign, which covered press and television, was cut short in the light of the early election call (no government advertising scheme can run in the eight weeks before an election) and in order to retain funds for coping with the unexpectedly heavy response.

Besides the ad campaign, the COI ran direct mail shots, seminars around the country, and distributed literature through professional associations and banks. The results, it says, were due to a combination of good creative work, well balanced media selection, very good support literature (the ad coupon invited enquirers to write off for a handbook called "How to Make Your Business Grow, a guide to government schemes and services") and a good response mechanism.



FOR MANY companies, the business of responding to enquiries from potential customers is an everyday affair. But how many are adequately followed through, and how efficiently or cost-effectively?

Now there's a computerised reader enquiry management system, available to European advertisers, that promises to take care of this while area.

The idea of the Computerised Enquiry Handling System (CEH System), from G and G Communications of Switzerland, is to help business-to-business publicity managers to service, efficiently and speedily, reader enquiries and sales leads which are generated through advertising, direct mail, public relations or any other media.

The CEH System, which is Swiss based and confidential, will fulfil all literature requests, telephone each respondent and send all leads directly to the client's sales force anywhere in the world.

An advertiser has the option of doing his own telephone follow-up or using CEH System's multilingual telephone interviewers to act as salesmen.

Reps, together with their management teams, receive monthly print-outs on all enquiries, their quality, which ones have been followed up and which have not.

UK enquiries to Alan Roberts, Green Rusbis, 35 Woodside Close, Amberham, Bucks. (tel. 0296 7235), or Paul Godden, G & G Communications, Switzerland (tel. 022-76 49 21).

IN APRIL Rupert Murdoch's satellite television, Sky Channel, will broadcast eight hours of programmes a day into UK homes at Swindon, Milton Keynes and Greenwich. Six minutes of advertising an hour are available, and the channel will feature vintage American series such as Charlie's Angels and Starsky and Hutch. The channel is currently received in 300,000 cable homes in Norway, Finland, Malta and Switzerland.

FMCE

Hapag-Lloyd Reisebüro haben nur Schiffsreisen. Irrtum.



## Altering an image

Hapag-Lloyd is not just a shipping line. John Davies reports

MODELS AND paintings of ships, proudly displayed, line the corridors leading to the office of Heinrich Sabarth in West Germany's wind-swept maritime city of Bremen. For Sabarth and fellow executives of Hapag-Lloyd Travel Bureau, ships are both a source of satisfaction and a nagging headache which they are trying to ease with a new advertising campaign.

"Many people believe we only offer cruises—and on our own ships," he says. "But we want to make it clear that we carry out all kinds of travel agency business and offer a whole range of holidays."

The crux of the problem is that the travel concern, which is profitable, tends to be overshadowed by the other, currently loss-making operations of the old-established Hapag-Lloyd shipping group. But how can you carve out a separate identity and how can you change an image that you feel is misleading?

These questions have become more pressing as price-conscious West Germans have tightened up on holiday spending and as competition between travel groups has intensified. As Wolfgang Metz, the travel subsidiary's chief executive, points out, West Germans are tending to take shorter holidays, travel less far afield, and have a tendency to wait longer before booking—which has added further uncertainty to the travel trade.

For Hapag-Lloyd the problem has resulted in the number of holidays booked through the company—other than for its

own tours—slipping from 210,000 in 1981 to about 200,000 last year. The company, with 79 travel bureaux in West Germany and abroad, is therefore fighting back with a DM 3.5m (£875,000) advertising campaign, increased from about DM 3m last year, in the national newspaper Der Spiegel, and in 42 regional daily newspapers.

"Hapag-Lloyd travel bureaux only have shipping cruises. Wrong!" proclaim the advertisements, with the message backed up by the sight of an aircraft streaking across the sky. Further text declares that all-inclusive holidays by air, adventure safaris, swimming and fitness holidays, as well as train trips, are also offered by the company.

The advertising campaign is the work of the Frankfurt-based agency, Borsch, Stengel and Partner, which won the account in competition with Hapag-Lloyd's original Bremen agency and a third agency—having carried out, "on its own initiative, an opinion poll which backed up the result of a market research study made for us in 1980," says Sabarth. "They asked people: 'If you wanted to go on a cruise, where would you book?' Ninety-five per cent of those questioned replied: 'Hapag-Lloyd Travel Bureau.' This confirmed our impression that many people regard us, wrongly, as predominantly a shipping travel agency."

In fact, the company today offers cruises on only one vessel of its own—the two-year-old Europa—though it offers cruises on other shipping lines.

Hapag-Lloyd's new campaign is aimed at roughly the same social strata it now serves—the middle-income bracket and higher. At the same time, though, it is seeking to break down what it sees as a certain "Schweigenangst" among potential customers—a trepidation about entering a travel bureau with a somewhat expensive image. Indeed, its long-cultivated image of quality and comfort was the obstacle to Hapag-Lloyd's attempt some years ago to attract customers from lower economic and social levels.

Now, the campaign declares bluntly: "Hapag-Lloyd travel bureaux only organise expensive world tours. Certainly not!"

Emphasis is given to package tours at competitive prices, though the approach is tempered by a carefully-worded slogan pitched at up-market clientele: "Auch pauschal sind wir individuell." Roughly translated, this says: "Even our package tours are highly individual."

Though travel represents a relatively small part of Hapag-Lloyd's activities its importance to the group is abundantly clear in the current recession. In 1982, the travel subsidiary's turnover of DM 378m represented only a fifth of group turnover of DM 4.3bn. But while the group, suffering from declining trade, particularly across the Atlantic, on the shipping freight side which dominates activities, suffered a loss of DM 68.5m, Hapag-Lloyd Travel managed to turn in a profit of DM 10.5m.

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Interested applicants should telephone Roger Tipler, on 01-242 0695 or write to him at Banking and Finance Division, Michael Page Partnership, Sicilian House, Sicilian Avenue, London WC1A 2QH. Please quote reference 3347.



**Michael Page Partnership**  
International Recruitment Consultants  
London New York  
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## JOBS COLUMN

# Accents—the last word • High technology

BY MICHAEL DIXON

BEFORE anyone else who read last week's column rings up and apologises for having a posh accent, I'd like to make something clear. It's that even if such apologies are sincere—which I doubt they all are—they are quite uncalled for.

If your voice gets you identified as a Hooray Henry then you are no more to blame for it than the Jobs Column is for occasionally being taken for a refugee from Coronation Street or a supernaturated music ball comedian. The fault is in the lughole of the micro-minded listener. And if we're to believe Tom Carew, head of the Percy Courts careers consultancy, it is worse than pointless for those of us with obtrusive accents whether lah-di-dah or ee-by-gum to try to convert ourselves to sanitised standard speech.

The result is usually "disastrous." Mr Carew says from his long experience of helping executives to recover from the sack or otherwise to win new jobs, "it's comparable to the bald buying wigs."

That is not to say that a bit of speech training is never of value in improving a person's career prospects, he adds. Indeed the Courts consultancy itself retains an elocution teacher for use in appropriate cases. But the object of the training is not to sanitise the person's accent. The aim is

solely to improve the style of spoken delivery.

"It is the delivery that counts—the confident, clearcut articulation of words, and good long pauses to emphasise the pride of the speaker in his own upbringing. Roll out the accent with pride, articulate with clarity, be not ashamed of it. ... It really works."

### On the cards

THIS WEEK'S fuss over the Sunday Times's report that the British Government plans to issue all its users of the National Health Service with computer-linked plastic membership cards, perplexes my colleague Gareth Griffiths. He reported the plan in the FT on August 30. But there is someone else I know of who is extremely pleased by the widespread, if somewhat delayed public reaction.

He is Michael Davies, managing director of the Data Card group which is supplying the plastic tokens in question. He sees the publicity as a powerful help in the prime task of developing new as well as existing markets for the group's products and services. They include not only plastic cards to establish people's identities and the like, but also specialised printing work and various other kinds of computer-linked

security equipment and systems. What he sees as still more important to expansion, especially since his responsibilities extend to Europe, Africa and the East in general, are two jobs he has just put on the market through headhunter Nicholas St John-Moore of Executive Appointments. Although both of the newcomers will work from Data Card International's base at Havant near Portsmouth, they are likely to spend a quarter or more of their time travelling to numerous places including group headquarters in Minneapolis.

The first post is for a general manager of the plastic-cards side of the international division. This recruit's 110-staff domain will include manufacturing plant which supplies cards to customers everywhere except in the United States domestic market. (The reason is apparently that you get a better class of plastic from European producers than from the U.S. variety.) But the prime task will be developing markets, and success in that activity at managerial level in some comparably new-technology business is the most important qualification.

Similar skill is also wanted in the second recruit who will be the international division's marketing services director. But here there will be emphasis on sound technical understanding

because the responsibilities include services to customers such as tailoring Data Card's equipment and systems to existing computer installations, as well as deciding on the technological strengths and weaknesses of proposed innovations. So a degree-level qualification in computer science or electrical or electronic engineering is desired.

In either case there is a preference for people with experience of management in a business spanning several countries. Fluency in other languages would be helpful, but is not a must.

The salary indicator for both jobs is £25,000-£28,000, plus bonus. The other benefits include company cars.

Inquiries to Mr St John-Moore at 18 Grosvenor Street, London W1X 9FD; telephone 01-499 0518, telex 27950.

The computer job, with an international group whose business is mainly in peripheral equipment and services, is for a vice-president to control its marketing in the Far East and South America. Detailed and up-to-date knowledge of those markets, particularly in the Far East, and success in exploiting them are the prime requirements. The recruit could work from either America or Europe.

Mr Lilley's other offer is a marketing and sales director's post in the Gulf States with a company manufacturing and distributing products for the building industry. Candidates must have the experience and knowledge of the needs and preferences of construction concerns operating in the Middle East to guide the company in its pricing policies and the choice of new products, as well as to lead the day-to-day sales effort. Here the recruit will have expatriate perks in addition, probably, to low tax on the \$100,000 salary.

Inquiries to Nigel Lilley at 7 Cork St., London W1X 1PB; Tel: 01-734 1843, Telex: 261507 Monref G 2430 CKL—or for the benefit of readers nearer America than Britain, to his U.S. associate headhunter Bill Knudsen at 1811 West 22nd St, Oak Brook, Illinois 60521; Tel: (312) 789 8860.

### \$100,000

WHAT'S MORE, computer industry experience is essential in one of the two jobs carrying salaries of around U.S.\$100,000 being offered through consultant Nigel Lilley of CKL Management Services. In neither case may he name his client. So, as always when a headhunter mentioned in this column keeps the employer's identity secret, he promises to abide by any applicant's request to have his or her name kept secret from the employer.

### Systems

DEVELOPING high-technology operations will also be the central concern of the information systems manager being sought by Geoffrey King of Cambridge Recruitment Consultants for neighbouring Acorn Computers. The company, which already has footholds in the U.S., Hong Kong and Germany, is keen to extend its international markets and the new-

## Tax Consultants

MWP Limited is a consultancy company owned by Morgan Greenfell, Willis Faber and PA Management Consultants. It has a high reputation for advising corporate clients in the areas of executive remuneration and incentives, share participation schemes and tax and financial planning.

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The successful candidates will be responsible to the Chief Executive for project work with existing clients and for the development of additional client contacts. These positions provide excellent opportunities to work closely with the senior management of many of the largest and most successful companies in the UK.

Salary and benefits will be appropriate to an important role in a small but expanding company and applicants should write with CV to: R.G. Bowen, Chief Executive, MWP Limited, 7th Floor, Bowater House East, 68 Knightsbridge, London SW1X 7LJ.



## Robert Fleming International Corporate Finance

Robert Fleming & Co. Limited is actively developing its international corporate finance business. An opening exists for a corporate finance executive to be primarily responsible for the further development of business with Japan. This will include primary market operations, private placements and acquisitions.

Based in London, the position will require close liaison with overseas offices, principally Tokyo, and detailed knowledge of the Japanese security markets. Experience of the Japanese stock market, gained in corporate finance, broking or investment, is considered essential. The ability to speak Japanese would be a distinct advantage but is not necessary. Preferred age is 26-32.

Applicants should write, enclosing their curriculum vitae to: C.M. Moore, Robert Fleming & Co. Limited, 8 Crosby Square, London EC3A 6AN. Tel: 01-638 5858.

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For an explanatory booklet and application form call Linda Hobbs on Swindon (0793) 46700 (24-hour answerphone), or write to: Personnel Division, Hambro Life Assurance plc, Allied Hambro Centre, Swindon, SN1 1EL.



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T.L. Roberts, (Ref 249), Director

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British Airways is back in the black again and intends to maintain and improve its profitability in the rest of the 80's and beyond.

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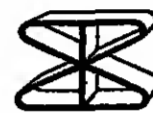
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Circa £22,500 p.a. plus Car

Our client is an operating group of one of the largest British international organisations with interests in retailing, consumer goods, packaging, printing and paper products.

A subsidiary company based in the East Midlands manufactures a range of metal and plastic containers and other products, with a turnover of around £30 million. This is a dynamic and profitable business, employing 700 people.

A Commercial Director is required to be responsible for accounting, purchasing, personnel and the negotiation of major sales contracts.

Applications are invited from candidates, male or female, fulfilling the following criteria:

- \* Accountancy qualification with subsequent financial experience
- \* MBA an advantage
- \* Aged 30-45 years
- \* Experience in financial accounting and purchasing of large volume commodities

A member of the Rex Stewart Group  
LONDON ABERDEEN BIRMINGHAM BRISTOL EDINBURGH  
GLASGOW LIVERPOOL MANCHESTER NEWCASTLE NOTTINGHAM

- \* Negotiating experience for long term, high value sales contracts
- \* Awareness of the management processes and disciplines in a company of a similar size, including some acquaintance with personnel management and industrial relations.

The vacancy arises due to the planned promotion of the existing incumbent. The successful candidate will understand the current Commercial Director for a short period before being appointed to the Board. Capability to progress further with the organisation will be an advantage.

Please write, including brief details of qualifications and experience and quoting reference 659/FT, to: Mark Carmel, Riley Advertising (Southern) Ltd., Old Court House, Old Court Place, London W8 4PD.

Please list any companies to whom you do not wish your application forwarded. All applications will be treated in the strictest confidence.

Confidential Reply Service  
**Riley**



## Financial Analysts c£13,000 p.a.

Aylesbury, Bucks. West London

Our position as one of the UK's leading record companies and our plans for future growth are placing ever increasing emphasis on the need for greater financial expertise. To meet this demand we now wish to appoint two Financial Analysts, one based at Aylesbury in Buckinghamshire the other at White City, West London.

A prime aspect of the jobs is the provision and explanation of financial information for the Sales and Marketing functions to operate successfully and profitably within agreed budgets. Apart from developing the principles and parameters of annual budgets you will provide the financial expertise within the management teams of several business units and will be expected to contribute fully to the decision making process.

Ideally aged 25-30 you will be a qualified accountant with a high degree of drive and enthusiasm. Your skill of communicating effectively and persuasively both verbally and in writing will be complemented by the ability to work on your own initiative, and under pressure to meet deadlines.

Both jobs provide genuine opportunities for personal development and career advancement with rewards to match. In addition to a salary of c£13,000 p.a. there is the substantial package of benefits you would expect from a Company of our prominence in the marketplace.

Please write enclosing a detailed c.v. to Henry Gilbert, Personnel Officer, CBS Records, 85 Barbican Road, London W10. Alternatively phone him on 01-969 3277 for an informal discussion about the jobs.

**CBS RECORDS**

### Senior Corporate Finance Executive Age 28-32

Minster Trust Limited, a well-established Issuing House of high repute, continues to expand its extremely active corporate finance department.

As part of this policy, the company seeks to recruit an additional executive at senior level. Reporting to the director, the appointee may expect immediate involvement in any of a wide range of activities, including acquisitions and disposals, rights issues, flotations and management buy-outs.

Candidates should be graduates, and a further qualification in law, accountancy or business administration would be an advantage. Sound experience of corporate finance with a merchant bank or stockbroker is essential. Personal

qualities should include business development skills along with a high degree of technical competence.

A competitive salary is negotiable and fringe benefits will include a company car.

Please write in confidence, quoting reference 4731/L and enclosing complete career details, to N.P. Holsley, Peat Marwick Mitchell & Co., Executive Selection Division, 165 Queen Victoria St., Blackfriars, London EC4V 3PD.



### Marketing Executive

#### INVESTMENT MANAGEMENT GROUP

Temple Bar Fund Managers offer an excellent opportunity marketing their range of Funds and recently acquired Craigmount Unit Trusts to institutions, investment advisors and the general public. Applicants should have experience and a proven track record.

Please write enclosing c.v. to:

Miss Anne Sharples

Temple Bar Fund Managers Limited

Electra House, Temple Place

Victoria Embankment, London WC2R 3HP

### RETAIL SECURITY SALES - U.S. BROKER LONDON

Our client, a major U.S. broker, will shortly appoint an executive to help develop their retail business. The likely candidate, a registered NASD NYSE, will now be working within the broking field and will have already established a successful track record in this area.

This is a rare opportunity to develop some exceptionally strong outlets with a firm that has a first-class reputation in the investment world. Remuneration will be negotiated but will be generous and will be unlikely to prove a problem to the right candidate.

Please apply to Jock Coutts, Career Plan Ltd., Chichester House, Chichester Rents, Chancery Lane, WC2A 1EG. Tel: 01-242 5775.



## Company Tax Specialist

We have a career opening for a young tax specialist in our Taxation and Corporate Structure Department in London, initially dealing with U.K. corporate tax.

The successful applicant will be either a qualified accountant intending to work for the Institute of Taxation exams, or a fully-trained Inspector of Taxes and will have at least two years post-qualification experience of Company Taxation. Candidates should be under 30 and a University degree would be an advantage.

A salary will be offered commensurate with age and experience. In addition we offer a wide range of company benefits. Please write or telephone for an application form to:

Shell International Petroleum Company Limited, Recruitment Division (FT), (PNE/L/23), Shell Centre, London SE1 7NA. Telephone 01-934 6966.



## Junior Dealer

Saudi International Bank is a leading international bank based in the City with offices in New York and Tokyo. Its shareholders include the Saudi Arabian Monetary Agency and several of the world's major international banks.

With the expansion of its dealing activities, the Bank is now able to offer a career opportunity to a Junior Dealer who already has one or two years experience in a bank dealing room. Although thorough on-the-job training in all aspects of the Bank's dealing activities will be given, it is expected that the successful candidate will later specialise in one product area.

The vacancy will be attractive to those junior dealers who wish to move into a responsible position which has excellent growth potential and an attractive salary and benefits package.

Please write to: Sally P Morse, Personnel Division, Saudi International Bank, 99 Bishopsgate, London EC2M 3TB.

البنك السعودي العالمي المحدود

Saudi International Bank  
AL-BANK AL-SAUDI AL-ALAMI LIMITED

## Investment Analysts (Scotland)

Our client is a well established and successful life office. Promotions and expansion have created opportunities for additional staff in their team of Investment Analysts.

If you are the type of person our client is looking for, you will know that investment is vital to a life assurance organisation. You will also know that this specific role is also of critical importance.

You should have a good honours degree with about three years experience in industry or commerce. You must be highly numerate with a keen interest in, and some knowledge of, finance and investment although you may not be in this field at present. You must certainly have a definite flair for absorbing and assessing information and forming clear judgements. Before being given special responsibility for certain sectors of the equity market, you will be given extensive on-the-job training.

On offer is an excellent regularly reviewed salary as well as non-contributory pension scheme and a very attractive staff house purchase scheme.

Make a new life for yourself in life assurance by writing with a full CV, quoting Reference 658 to:

Ann Ridge, Confidential Reply Service, Riley Advertising (Southern) Ltd., Old Court House, Old Court Place, Kensington, London W8 4PD.

All applications from individuals, male or female, will be opened, acknowledged and forwarded to our client. Please list separately any companies to which your application should not be sent.



## U.K. Marketing Create New Business to £14,000 + banking benefits

This expanding and forward-looking British Merchant Bank offers a wide range of banking services and is seeking an additional U.K. Marketing Officer to join a small and highly successful team specialising in development of new business opportunities.

You will work closely with existing members of the Department, reporting to the Manager. Your responsibilities will cover all aspects of new business development including research, planning and meeting potential new customers to market all the Bank's services. You will then prepare proposals for presentation to the Bank's senior management. Day-to-day servicing of

customers' affairs is undertaken by the relevant banking department.

You are a graduate, probably possess a professional qualification and have 3 to 5 years' experience in banking, ideally with a major British bank. You are highly-motivated, possess well-developed analytical and communication skills and can demonstrate a successful track record to date.

If you consider you are ready for a new challenge, write enclosing a CV or telephone for an application form to Barbara Lord, Cripps Sears & Associates Ltd, (Personnel Consultants), 68/69 High Holborn, London, WC1V 6LH. Telephone 01-404 5701 (24 hours).

Cripps, Sears

## The Institute of Marketing DIRECTOR GENERAL

Thames Valley c. £25,000

The Institute, which is one of the leading professional institutions in the world, is seeking to appoint a Director General to succeed Mr. Peter Blood who has announced his intended retirement in March, 1984.

The role is a demanding one involving full responsibility to Council for the successful management of Institute affairs and a wide range of professional services including their highly regarded management centre and College of Marketing.

The requirement is for a person with outstanding leadership, negotiating and organising abilities, strong commercial and financial skills and a successful record in general management at a high level. A formal qualification in marketing is essential.

Remuneration for the position is negotiable and will include a car and other benefits indicative of a major organisation. Preferred age range - 40's.

Please write fully and in complete confidence to: Derek Dodds, Director, quoting reference 116/FT Mainstay Management Services Limited, 34 York Street, Twickenham, Middlesex, TW1 3LJ. Tel: 01-891 3301

MAINSTAY Management Services

## INVESTMENT ANALYST

We are the UK Head Office of a leading Australian Life Assurance Company and are relocating to Poole, Dorset in mid 1984.

We require an analyst aged 26-30 with 2-4 years experience to supplement our expanding investment team. Applicants should have a suitable degree or professional qualification and are expected to be well versed in all aspects of investment research. The successful applicant will be expected to move to Poole and relocation assistance will be given.

Salary is negotiable according to experience, age, qualifications etc. Fringe benefits associated with a life office will apply.

Please write for application to:

M. J. Cummings, Personnel Manager, The National Mutual Life Association of Australasia Ltd., Austral House, Basinghall Avenue, London EC2V 5EP



### ENERGETIC MIDDLE-AGED PERSON

of some private means sought by international professional firm to develop their sporting agency business on a retail and commission-sharing basis with success, and C&P provided. A seriously challenging and interesting opportunity, having considerable financial potential with considerable scope for growth. Successful candidates should be over 25 years of age, well educated, with several years experience in a recruitment consultancy/agency dealing specifically with the placing of permanent and temporary Secretarial and Clerical Staff. (However, experience of placing other grades of Staff including Accounting Staff, would be particularly useful.) The client's requirement will be to quickly establish new client contacts and consolidate existing ones. The ability to motivate Staff is an obvious essential, as is to become quickly responsible for the overall profitability of the branch.

### PARTNERS' ASSISTANT

Old established member firm require a partner's assistant, aged between 25 and 35, for private clients' work. Good experience and knowledge essential. Competitive salary and conditions offered. Write Box A8462, Financial Times, 10 Cannon Street, EC4P 4BY

### MANAGER - RECRUITMENT CONSULTANCY £12,000 P.A. + BONUS

We are a small but long established Recruitment Consultancy with offices in the City and South London areas. We now wish to recruit a Senior Consultant/Manager to be responsible for the expansion of the business at our office in the City of London. The person we are seeking should preferably be over 25 years of age, well educated, with several years experience in a Recruitment Consultancy/Agency dealing specifically with the placing of permanent and temporary Secretarial and Clerical Staff. (However, experience of placing other grades of Staff including Accounting Staff, would be particularly useful.) The client's requirement will be to quickly establish new client contacts and consolidate existing ones. The ability to motivate Staff is an obvious essential, as is to become quickly responsible for the overall profitability of the branch.

The scope for the right person is limitless and therefore our expectations are high. However, so are the rewards, and we envisage a basic salary of not less than £12,000 per annum plus a generous bonus geared to results. The right applicant should easily earn £16,000 in their first year. If you think that you are up to taking on this challenge please write in complete confidence to Box A8462, Financial Times, 10 Cannon Street, London EC4P 4BY

If there are any companies to whom your application should not be forwarded, please send it with a covering letter addressed to the Box Number department at the above address

### TREASURY MANAGER (NEW BANK)

During 1984 several international banks will be establishing a presence in the City, this challenging opportunity exists with one of the biggest and calls for the services of a successful Treasury Manager or Chief Dealer of repute who is capable of setting up and managing a very active and profitable dealing room.

Please contact: David Little

### CORPORATE FINANCE

A leading International Merchant Bank plans to extend its corporate finance activities in 1984 and have commissioned us to seek suitably experienced staff. The new positions range from junior, a few months experience to senior, many years experience. The common factor is that the successful applicants will be well qualified, a relevant degree, ACA or MBA, and banking experience gained in the Corporate Finance Dept of an Accepting House, Merchant Bank or large US Bank. Areas of banking covered should include mergers and acquisitions, loan syndications, bond issues, private placements, money market activities, swaps etc.

Please contact: Richard Meredith

### SENIOR FOREIGN EXCHANGE DEALER (AGE 30-35) c£20,000

A senior dealer with broad experience is needed to join a small international bank. This position may have Chief Dealer potential and involves both spot and forward dealing in all major currencies. Suitable candidates will be Chief Dealer or No. 2 within a small dealing room, and will have at least six years active dealing experience.

Please contact: Diana Warner

Jonathan Wren BANK RECRUITMENT CONSULTANTS  
170 Bishopsgate - London EC2M 4LX - 01 623 1266

### Healthcare Analyst

A leading City stockbroking firm, currently establishing a healthcare specialisation, requires an additional healthcare investment analyst.

The ideal candidate will have experience in a similar position and must have a good knowledge of the ethical and proprietary drugs businesses. An attractive remuneration package is offered. Age indicator 26-32.

Write with full curriculum vitae to:

Box A8438, Financial Times  
10 Cannon Street, London EC4P 4BY

### HENRY J. GARRATT



seeks STOCK EXCHANGE MEMBER or similar with own investment clients to augment their EXETER branch office. Opportunity to join small but developing office of friendly London-based firm.

May suit applicants of 40+ who look to cut commuting and costs.

Please apply to GRAEME LIVING in London. All enquiries will be treated in total confidence.

Bourne House  
34 Copthall Avenue  
London EC2R 7BB

Broadwalk House  
Southernhay  
Exeter EX1 1TS

### ECONOMIST

£9,500-£12,500 p.a. + benefits for key appointment in small, authoritative economic research unit in internationally recognised - internationally orientated - national association (SWI). The work of the unit is of an essentially practical nature. Applicants invited from graduates with a good honours degree (ideally Economics or Statistics) and at least 3 years' experience as an economist in industry, government and/or professional body. Much of the unit's work lies in the preparation and submission of reports on the highest level in the UK and Europe. Applicants should possess excellent oral communication and formal report writing skills. An awareness of quantitative methods, forecasting, taxation issues, etc. and a knowledge of French very helpful. Write, in confidence, with detailed C.V. please, to Managing Director, Massey's Executive Selection, 100, Bell Street, W1, 01-935 0581

# CJA

**RECRUITMENT CONSULTANTS**  
35 New Broad Street, London EC2M 1NH  
Tel: 01-588 3588 or 01-588 3576  
Telex No. 887374

Key opportunity for a Foreign Exchange specialist, who as a member of a young treasury management team will have the scope to effect strategy and future treasury policies. This appointment is on a renewable contract basis.



## CHIEF FOREIGN EXCHANGE DEALER

KUWAIT

c. £50,000 BASE SALARY TAX FREE

A PREMIER KUWAITI BANK

We invite applications from experienced Foreign Exchange Dealers, in their late 20's to early 30's, who must have at least 8 years' significant dealing experience including 3 years in a managerial/supervisory position. Any overseas experience will be an added advantage. The successful candidate will have total responsibility for further developing and motivating an established team dealing in the full range of currencies. The requirement is for a prime mover capable of building a highly profitable operation. Initial base salary is negotiable c. £50,000 tax free, and other benefits include free furnished accommodation, car allowance, home leave air passages for individual and family. Applications in strict confidence under reference CFE015309/FT will be forwarded unopened to our Client unless you list companies to which they should not be sent in a covering letter marked for the attention of the Security Manager.

CAMPBELL-JOHNSTON RECRUITMENT ADVERTISING LIMITED, 35 NEW BROAD STREET, LONDON EC2M 1NH

An important widely-drawn line-management appointment



## DEPUTY TO CHIEF ACCOUNTANT — BANKING

LONDON E.C.2.

£13,000 — £17,000 + CAR

INTERNATIONAL MERCHANT BANK — ASSETS IN EXCESS OF \$500 MILLION

Applications are invited from qualified accountants (ACA, CA), aged 25-28, with at least one year's post-qualification experience either in auditing the accounts of banking clients, or as an accountant in a bank or financial institution, utilising computerised accounting systems. Responsibilities will cover, through a small team, the provision of monthly management accounting information, budgeting, forecasting, variance analysis, consolidations and tax computations. The main priorities are to ensure the smooth-running and efficient operation of the Accounts Department to tight deadlines, developing the accounting systems in line with business expansion. Of particular importance is the ability to assess priorities, communicate effectively and take responsibility for a wide range of duties. Initial salary negotiable £13,000 - £17,000 + car, mortgage subsidy, non-contributory pension, free life assurance, free BUPA. Applications in strict confidence, under reference OCA064/FT to the Managing Director.

ACCOUNTANCY & LEGAL PROFESSIONS SELECTION LIMITED,

35 NEW BROAD STREET, LONDON EC2M 1NH. TELEPHONE: 01-588 3588 or 01-588 3576. TELEX: 887374. FAX: 01-438 9216

\*Please only contact us if you are applying for one of the above positions.

### COMPANY LAWYER

**EDINBURGH**  
Balfour and Manson require a highly motivated company lawyer to assist in its expanding corporate department. Applicants should preferably have at least two years' experience in this field. Salary will be competitive. Career prospects are good.  
Please write with full curriculum vitae to:  
K. M. Stewart  
BALFOUR AND MANSON  
Solicitors  
58 Frederick Street, Edinburgh

**Mike Pope & David Patten Partnership**  
Bank Recruitment Consultants  
Senior Lending Officer: VP (Miami Branch) to £25k  
Eurobond Sales Executives / Traders E neg  
Business Development Officers 27-33 Grades to £20k  
Corporate FX Deals with French 15 £20k  
Asst Operations Manager (20-25) with Doc Credit to £15k  
Securities Clerk, Grade 3/4 to £13k (23/26) c £8.5k  
Please Phone Mike Pope 01-247 0063  
Bank Chambers, 214 Bishopsgate London, EC2

**MARKETING OFFICER**  
to £20,000  
Further your career with this expanding American bank as part of their European lending team. You will need at least 3 years marketing exp together with a proven track record of corporate finance and a graduate aged 27-36. Excellent prospects lead to "team leader" or overseas appointment.  
For full details phone:  
Mike Blundell-Jones 01-439 4381  
**PORTMAN RECRUITMENT SERVICES**

**BIRKENHEAD SCHOOL BURSAR**  
Required as soon as possible. Candidates must have specialist and administrative experience. Salary according to Burman 57 scale, at present £8,455 to £12,744. Accommodation available. For further particulars apply to: Headmaster's Secretary, 55 Seacombe Road, Birkenhead, L43 2JA, or forward application, along with details of experience with names of two referees.

## REGIONAL MANAGER

(ADMINISTRATION & DISTRIBUTION) North London

c. £16½k plus car plus profit sharing  
Project is one of the leading manufacturers and suppliers of wooden office furniture with a turnover in excess of £18 million. By continuing to pursue a policy of planned growth and expansion there is now a requirement for a Regional Manager to join the Senior Management team at the Walthamstow premises servicing the South East region.  
Reporting to the Director (Southern Region) this newly created key position's task is to coordinate effectively three activity areas of Sales Administration, Warehouse & Transport and the Service Centre which incorporates a small manufacturing unit. Each of these areas is headed by its own manager supported by a combined workforce of over 60 and, apart from the usual range of duties associated with these areas, specific responsibility will include:  
- The management of computerised systems to achieve integrated management control.  
- Close liaison with customers, the sales force, factory and other regional areas.  
- Training and development of staff to maximise potential and improve efficiency.  
This is a senior specialist appointment embracing a number of disciplines and the successful applicant will have extensive relevant management experience in a medium to large organisation. Ideally a graduate and/or M.B.A. qualified, the possession of a valid Road Transport Operators License would be advantageous.  
The post is a demanding and challenging one offering considerable scope for personal growth and development. In return the rewards are high and include company car, profit share, pension, sickness scheme, optional BUPA and relocation expenses where appropriate.  
To apply: Write in the first instance enclosing a full C.V. and marking the envelope "Private & Confidential" to:  
The Personnel Manager, Project Office Equipment,  
Hamlet Green, Havertill,  
Suffolk. CB9 9QG

**THIS IS AN EQUAL OPPORTUNITY COMPANY**



## Senior Financial Strategist

c.£20,000 + car

Consolidated Gold Fields PLC, the parent company of an international mining finance and natural resource group, has a vacancy for a senior financial strategist in the Planning Department at its corporate headquarters in London.  
The job will involve evaluation of a wide range of projects, including acquisitions, and work on the development of overall financial strategy and treasury policy.  
Applicants should be graduates, preferably with a chartered accountancy background or a financial MBA. They should have at least 3 years' experience gained in the corporate finance department of a merchant bank or in the investigations or management consulting division of a leading firm of chartered accountants. The successful candidate, who will be part of a team, will need to have a high level of technical competence and to be flexible, enthusiastic and energetic in his/her approach to work.  
Salary is likely to be in the region of £20,000 p.a. A company car will be provided and other benefits include a contributory pension scheme and 23 days annual holiday.  
Applicants should write to John Scholes at Consolidated Gold Fields PLC, 49 Moorgate, London EC2R 6BQ.

## Gold Fields

## Nordic Investment Banking NORWAY

Citicorp International Bank Limited is significantly expanding its activities in the Nordic countries and this has created an exciting opportunity for a professional Investment Banker to cover Norway in a marketing capacity.  
As a member of a highly professional team you will be based in London initially, although a move to Norway may be appropriate at a later date.  
A graduate aged around 30, you will have at least 4-5 years' experience with a merchant/investment bank including marketing and origination experience. Applicants from large commercial banks with relevant experience will also be considered.

You will be a self-starter and capable of closing transactions. Fluent Norwegian is essential.  
This is an excellent opportunity to join a successful, expanding unit and an attractive compensation package, usual bank benefits etc. will fully reflect your experience and qualifications.  
Please write with personal and career details to: Morley J. West, Group Personnel Officer, Citicorp International Bank Limited, 335 Strand, London WC2R 1LS.



## David Grove Associates

Bank Executive Recruitment  
60 Chancery Lane, London EC2Y 5RX  
Telephone 01-248 1858

**BANKING**

**MARKETING OPPORTUNITIES** £15-25,000 + bens.  
We are currently handling a variety of marketing appointments within major domestic and international merchant banks.  
Candidates must have established bank careers over a period of 4-5 years following graduation and/or professional qualification. They will have already gained bank marketing experience either in the U.K. or in other major financial centres overseas. Fluency in French could be useful.

**CREDIT ANALYSTS** £10-15,000 + bens.  
We are acting on behalf of a number of well established London branches of major international banks, who seek credit analysts to join active teams, in more senior cases with an opportunity to develop into a marketing role at an early opportunity.  
Candidates will probably be graduates or hold the A.I.B. but experience is most important, requirements ranging from 1-4 years.

**DEPOSIT DEALER** to £20,000 + bens.  
Our client, a recently established London branch of an international bank, seek an experienced Deposit dealer who seeks job satisfaction at this level. It is anticipated that the most appropriate age will be in the mid-thirties and experience will have covered a period of 10 years.

PLEASE CONTACT DAVID GROVE OR JOAN MENZIES ON 01-248 1858

## Sales Executives Fixed Income Securities

Our client, a major North American Investment House with an extensive European presence in equities, is looking to increase its involvement in the U.S. domestic and European bond markets through its London office.  
In order to fulfill the commitment of this major market-maker, executives with specialist skills are required to convert widespread client interest into actual business.  
Successful applicants will have a proven track record over a number of years in placing U.S. domestic bonds (Government and corporate) and/or eurobonds to institutional clients.  
These positions represent a fresh challenge for senior sales executives. Prospects and promotion will be entirely dependant on the level of personal commitment to the company.  
The company will secure and endorse the opportunities available to the successful individuals with the offer of a very competitive salary plus bonus.  
In the first instance please contact Nick Williamson, in complete confidence on 01-481 3188, Charterhouse Appointments Limited, Europe House, World Trade Centre, London E1 9AA, or on 01-743 9991 at weekends/evenings.  
Initial interviews will take place from January 16 through January 25.

**APPOINTMENTS ADVERTISING APPEAR EVERY THURSDAY**  
Rate £34.50 per single column centimetre

## Investment Analyst [Overseas]

**LONDON** up to £14,511  
The Pension Funds Investment Department of British Gas has a vacancy for an Overseas Investment Analyst to work with a small team based in High Holborn. The funds under management are valued at £2,000m with a net cash flow in excess of £200m per annum.  
The Analyst will be expected to meet and develop good relationships with both stockbrokers and senior management of companies within the overseas sector, particularly North America. Candidates should have a relevant degree or professional qualification and a minimum of 2-3 years experience of research, preferably on overseas markets. Progression to fund management will be actively encouraged.  
Working conditions are good, and benefits are those normally associated with a large progressive organisation.  
Please write with full personal and career details, quoting ref. F/00362/009, to: Senior Personnel Officer (HQ Services), British Gas, 59 Brynston Street, London W1A 2AZ.



## INTERNATIONAL BANKING

**U.K. CORPORATE MARKETING** c. £20,000  
Vigorously expanding international bank seeks an equally energetic banker to market its range of products to the UK corporate sector. Aged 28-35, you will need a sound credit background, together with the ability to identify and negotiate profitable business.

**CREDIT ANALYSIS** to £15,000  
Responsibility is to control and develop an effective research and analysis function in support of the bank's lending team. This calls for a formally trained, well experienced Credit Analyst with additional skills in people management.  
Opportunities also exist at slightly more "junior" level, extending career possibilities, embracing marketing for those with appropriate aptitudes.

**MANAGER, DOC. CREDITS** c. £14,000  
Medium-sized but expanding U.S. bank seeks an experienced and capable banker to manage its Doc. Credits operation. As well as strong personal qualities, the bank seeks knowledge extending beyond U.K. to other operational areas.

**RECENTLY QUAL'D ACCOUNTANTS (2)** to £12,000  
One of these requirements is to be responsible for accounting systems, taxation, etc. for the bank and for two offshore subsidiaries; the other seeks an opportunity to move into company financing. Both call for sound experience beyond just auditing, and plenty of energy.

**MONEY MARKET ANALYST** to £18,000  
The essential function is the short-term analysis of Foreign Exchange and Sterling Money Markets, relating closely with market participants. You'll need a high degree of numerical sound basic knowledge of these markets and strong communication skills.  
Please telephone John Chiverton or Ann Costello

**JOHN CHIVERTON ASSOCIATES LTD.**  
5, CARLTON COURT, LONDON, E.C.2, 01-623 3861

We are a major firm of Commodity Merchants in the City seeking an experienced person for our busy Cocoa Documents Department.  
The ideal candidate will be preferably aged between 21 and 40 and will have at least five to seven years' extensive experience in the processing of all contracts and documents. Accuracy is essential as is some knowledge of the Clearing House System.  
We offer a competitive salary together with a good range of benefits including private medical insurance, interest-free season ticket loan and luncheon allowance.  
Please apply in writing enclosing full c.v. to:  
Mrs. Helen Prince, Personnel Manager  
**ACLI LIMITED**  
21 Mincing Lane, London EC3

## Cranfield Chair in the Development of Small Business

The School of Management wishes to appoint a Professor in the Development of Small Business. This is a new chair sponsored by a major UK financial institution. The Professor will be responsible for building up a team which will create teaching and training activities and advisory services for the managers of small business, and for developing research programmes related to the small business sector. Candidates should have experience in this sector, including both management and business development.  
Informal enquiries should be made to Professor John Constable (0234 752728). Further information may be obtained from the Personnel Officer, Cranfield Institute of Technology, Cranfield, Bedfordshire MK43 0AL. Closing date for applications: February 17th, 1984.

## TOP EXECUTIVE APPOINTMENTS

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As the leaders in the field of executive job search, we specialise in identifying appointments in the unadvertised vacancy areas.  
Selected high calibre executives are offered our unique success-related fee structure.  
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73 Grosvenor Street, London W1. 01-493 8504 (24 hour answering service)

## THE HAMMERSON GROUP Company Secretary

The Hammerson Property Investment and Development Corporation plc wish to appoint a Company Secretary.  
Reporting directly to the Chairman, the Company Secretary will, on behalf of the Board of Directors, be responsible for ensuring full compliance of all statutory requirements for the Group and its subsidiary companies. Control of the administration of headquarters in London and its small staff will also be a responsibility. Detailed knowledge of Stock Exchanges and their practices is essential. Ideally aged 45-50, the successful candidate should have a relevant degree or qualification and the experience to demonstrate ability to handle the secretarial function of an international company of this size and stature.  
Please write in confidence with full details to: D. R. Sheppard,  
**DAVID SHEPPARD & PARTNERS LTD.**  
21 Cleveland Place,  
London SW1Y 6RL. Tel: 01-830 8786  
All positions advertised by David Sheppard & Partners Limited, Executive Search Consultants, are open to both men and women.

## CORPORATE BANKERS

The London Division of Irving Trust Company has a business development opening in their corporate banking activity.  
The successful candidate will have responsibility for developing and servicing relationships with major multinational companies.  
In addition to a degree or professional qualification, ideal candidates will have a significant record in corporate banking.  
Excellent prospects for career development are offered together with competitive salary supplemented by a full range of fringe benefits.  
Please write with career and personal details to:  
Andrea Williams  
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Thursday January 12 1984

# Kissinger backs Reagan

THE CHIEF beneficiary of the Kissinger Commission report on Central America released yesterday looks like being President Reagan rather than those countries in the region for whom substantially increased U.S. economic aid is proposed.

The bi-partisan Commission was set up last year with the specific purpose of deflating growing public concern over the increasingly interventionist policies of President Reagan's administration in Central America; in particular his commitment to the right-wing Government in El Salvador and support for the rebels trying to overthrow the Marxist-orientated Sandinista regime in Nicaragua.

## Strategic interests

The report provides sufficient inherent justification for these policies which President Reagan has always claimed have been based on the need to secure vital U.S. interests against the threat of Soviet and Cuban subversion. There is a basic acceptance that the U.S. cannot afford to permit the Soviet Union and its allies to secure a foothold in Central America. If this were to happen, the report concludes that the U.S. would be obliged to reconsider its defence strategy and for the first time consider land-based defences of its territory.

Two commission members disagreed with the tactic of supporting and subsidising rebels. Yet the Commission as a whole assumes that U.S. strategic interests permit it to influence, if not determine, events in its backyard, and at the same time to create a friendly regime. This is perhaps understandable; but it is to be doubted whether this kind of thinking brings peace and stability any closer to the region.

Indeed the report does nothing to minimise the fears of those both inside America and outside who believe that sooner or later the U.S. Administration will be sucked into greater military involvement in Central America. Strauss, former chairman of the Democratic Party, says in a comment that falls just short of

dissent in the report that the strategic nature of the analysis could confuse. Instead of focusing on the need for "a basic restructuring of internal political and social institutions," the report could be seen as favouring military assistance.

Even without greater military involvement, the report postulates a sharp increase in U.S. economic and financial assistance. An extra \$5bn is being proposed over the next five years.

The report proposes the creation of a new Central American Development Organisation as a sort of expanded version of President Reagan's Caribbean Basin Initiative. However, the value of this association risks being undermined, if created, by the criteria suggested. Only those countries willing to "commit themselves to internal democracy" would be admitted. At present only Costa Rica should qualify.

The Commission was most divided on the criteria for supplying aid. The Democratic members sought to tie U.S. aid to a country's record on human rights. Dr Kissinger himself took a more realistic view: if one accepts that vital U.S. interests are at stake, as in El Salvador, it is counter-productive to cut off aid since this merely enables a guerrilla victory.

## Central premise

President Reagan is not bound by the report and in this presidential election year it is unlikely that concrete policy initiatives will result. The report should be seen therefore as providing the President with some heat from the issue of Central America.

It is hard to argue with the central premise that Central America is vital to U.S. security interests. But the report brings the U.S. no closer to pursuing constructive policies that accommodate both its own interests and the legitimate aspirations of the countries in the region.

need not involve a commitment to particular production levels, since the industry must be able to invest in changing market conditions. But it should provide for continuing investment as well as closures, and should set financial objectives for five years or more rather than the year-by-year targets or limits which governments have set in the past.

The report shows that the industry cannot look to the European Community to solve its problems. The NUM's demand that the Community should meet all its coal requirements from indigenous sources and ban imports is wildly unrealistic; the countries which do not have large coal industries of their own will insist on paying in the open market, normally from non-EEC sources because they are cheaper.

## Fresh start

More questionable is the committee's suggestion that part of the NCB's debt to the Government should be written off. The argument is that a new financial structure would revitalise the industry's image and improve morale. But it is not obvious that a cosmetic improvement in the industry's financial performance would send the right signals to the workforce.

In the short term, nevertheless, a fresh start is possible—if the NUM wants it. The NCB management has been seeking to discuss with the unions a new long-term policy which would replace the 1974 Plan for Coal. The goal would be a low-cost, high-volume, high-paying industry, with investment in new pits coupled with early action on the loss-makers. Talks have been held up by the overtime ban and the imminent election of a new general secretary of the NUM. There is a possibility that the new incumbent will take a more pragmatic line than Mr Scargill and accept that there are limits on NUM's ability to blackmail the Government.

Regrettably, the future of the industry is heavily dependent on the internal politics of the NUM. With stable industrial relations and a joint commitment to a competitive industry, there is a good future for British coal. The state of permanent warfare which Mr Scargill seems to prefer can only damage the industry and its members.

NO ONE in the U.S. motor industry can remember anything quite like it. In 12 months, the Big Three manufacturers have rebounded from the depths to the heights—from just over break-even to record profits.

Three years of famine—and \$5bn of losses—have been followed by at least one of extraordinary plenty, and there is abundant promise of still more to come.

Yet all this was achieved while the U.S. industry was suffering from an acute long-term competitive problem in the small car sector. Further telling evidence of its difficulties accumulated this week in three separate announcements—the expansion of Honda of Japan's manufacturing facilities in the U.S., Ford's decision to set up a Mexican small car plant for exporting to the U.S., and General Motors' reorganisation to split the company into separate small and large car divisions.

These three developments all underline the fact that the major U.S. car companies have yet to find a way of making small cars profitable. Yet despite this, and in a market of only more than in 1980, when they ran up staggering losses of \$4bn. When costs come tumbling down, a touch of volume works wonders at the bottom line.

The unlikely catalyst of this resurgence lies in the recession, which provoked a process described by Mr Roger Smith, chairman of General Motors, as "taking the industry apart and putting it back together again."

In the course of this onslaught, about 40 plants were closed down by the big three, including 10 assembly units. Around 30 per cent of the 1m jobs in the industry went as well, and those workers that remained accepted wage concessions in return for profit sharing schemes which are likely to yield even more in the future. Ford claims to have taken over overheads worth about \$3bn in the U.S. compared with

its 1979 figures. The effect of these capacity reductions has been two-fold. The industry is now operating much closer to its real output potential, with fewer idle hands or machines lying around to give it flexibility. We are in balance throughout the business," as Mr Stephen Sharf, Chrysler's vice-president of manufacturing puts it. Thus productivity has gone up, in some plants rising by as much as 50 per cent since 1979.

At the same time, the unit break-even point has been brought down dramatically. Chrysler is now reckoned to be able to make profits at 1.1m vehicles a year as against 2.5m before the crisis; Ford's break-even is said to be around 2.5m cars and trucks compared with 4.2m; and General Motors' now stands at 4.3m against more than 5.5m.

Two other factors have also helped over the last 12 months. First, material cost increases

have slackened appreciably, rising by only around 2 per cent in nominal terms against expectations of at least 5 per cent.

Secondly, the market has shifted perceptibly towards higher value cars in one of those mysterious changes of mood which the industry finds so hard to explain. Rather than buying a second small car, customers have traded up to larger vehicles, or cars with more optional extras.

The final factor in the recovery is an entirely negative one, and it reveals the U.S. manufacturers' vulnerable Achilles' heel—import controls as described below.

The evidence of Japanese strength, now held at bay by these controls, has built up overwhelmingly in the last decade. When years ago, when the U.S. car market peaked at 11.6m units, importers held only 15 per cent, and the big three domestic companies made a

combined 9.6m cars. By 1982, when the market had fallen to 7.3m registrations, importers had almost 30 per cent of sales, and the U.S. manufacturers' production had been cut almost in half to 5m units.

In addition, foreign manufacturers are developing their own production facilities on the U.S. mainland—VW, Honda, Nissan and Renault already have an important presence.

Indeed, the weakness of the strategy of import controls has been shown up only this week by Honda's decision to expand its Ohio plant with the introduction of its sub-compact Civic model.

This plan means that it could be producing 300,000 units a year in the U.S. by 1988. Nissan, similarly, is expected to add car manufacturing to its van plant in Tennessee.

The net result of these moves is that the U.S. market, which for so long has had self-contained continental horizons

accepted that the Japanese manufacturers had a car in the U.S. market for about 20 per cent less, at cost price, than the local producers. But two-thirds of this differential, says Detroit, comes from circumstances outside its control—one-third from the over-valuation of the dollar, and another third from the lenient Japanese tax rules on manufactured goods for export.

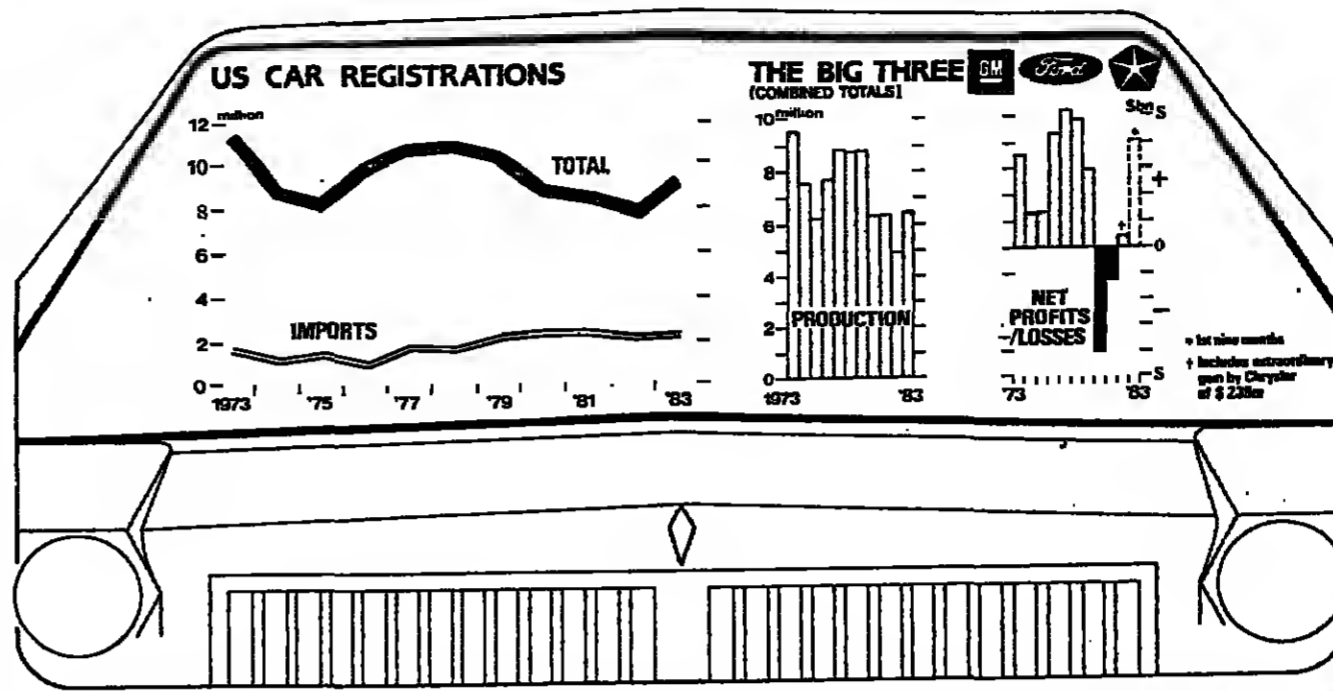
The manufacturers contend that if they only had to deal with the production efficiency differential of around \$600 to \$700 on each small car, they could effectively take on the Japanese: productivity is probably rising more rapidly at the moment than at any time since the last war. But to win the arguments on the dollar and tax, they need to speak with a united voice—a forlorn hope now that GM has broken ranks.

But there is no doubt that the overseas producers are currently capable of giving the indigenous companies a run for their money, and when the next recession comes round it is not certain that the big three will be quite as strong financially as they were back in 1979.

## U.S. MOTOR INDUSTRY

# Slim lines and fat profits . . .

By Terry Dodsworth in New York



produce 9.6m cars to achieve it; and this year's profits will be made on sales volume of more than in 1980, when they ran up staggering losses of \$4bn. When costs come tumbling down, a touch of volume works wonders at the bottom line.

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# ... but the Japanese are winning the small car battle

FOR ALL its current bout of hubbub enthusiasm, Detroit has significantly failed to provide a convincing answer to the most nagging question about its future: can it produce a small car to take on the challenge posed by the Japanese?

It is painfully obvious that, for the time being at least, the Japanese importers are winning the contest hands down. Their products have well over 40 per cent of the U.S. small car market, and but for the quota system which sets a firm ceiling on their sales (now 1.875m units a year) they would certainly have much more. "Imports would probably gain around 40 per cent of total car sales if all restrictions were lifted," concedes Mr Philip Benton, head of Ford's U.S. car sales—and his estimate is a very conservative one.

The latest demonstration of the U.S. industry's weakness in this field is the agreement between General Motors and Toyota on a joint small car assembly project in California.

GM has welcomed the deal as a way of learning more about Japanese methods—the plant will be run by Toyota and the car based on a Japanese design, while GM takes an equal share of the profits. But the agreement has opened up a true Pandora's box.

GM's competitors are furious with their heavy-weight rival, and it is not difficult to see why. If GM goes down the Toyota collaboration route, this reducing its front end investment costs, Ford and Chrysler may have to follow in some way. In the meantime, war that has broken out between these three, GM has been accused of selling out completely on small cars, and both its competitors have warned that they are unlikely to put up more money in this sector in the U.S. until the issue is clarified. "We are studying every GM move cautiously," says Mr Benton ambivalently.

One of these options would be for the other U.S. companies to play the Japanese card as well—a strategy in which Ford has partly embarked this week with its expansion in Mexico. The new small car to be produced in the \$500m plant will be designed with the collaboration of Toyota, Kogyo, the Japanese Mazda producer in which Ford has a 25 per cent stake, while around 90,000 units a year will be exported to the U.S.

Ford claims that the investment is based purely on its need to conform to the Mexican Government's "dollar in, dollar out" policy of maintaining at the worst a

neutral balance on its car trade, but it clearly helps the U.S. company in the small car battle.

Over in the GM camp, a public relations counter-attack has been mounted against the criticisms with the announcement of a new long-term small car project. Code named Saturn, its main interest lies in GM's decision to break with much of its previous thinking on small cars in the U.S. The company says that it is remodelling its ideas from the ground up in terms of technology, assembly methods and workforce practices.

While this revolutionary approach has been greeted with considerable scepticism elsewhere, GM's move to split its car activities into two divisions for small and large vehicles undoubtedly adds weight to its new approach. It means that responsibility

for small car design, manufacturing and marketing will be much more clearly defined than in the past.

This squabbling among the big manufacturers has proved a diverting side show among the trade press, but it also raises a serious target. For a company like Chrysler, which is still fighting for survival, and to a lesser extent for Ford, it is crucial to present a united U.S. front to the Japanese so that the rules of the trade game can be redrawn to give the home industry an easier target. "We are not competing on a level playing field at present," says Mr Richard Ogden, from Ford's strategic planning department.

The argument over unfair competition comes back to the value of the dollar and the way the Japanese tax the cars they export. It is broadly

## Men & Matters

### Top draw

Gambling fever is sweeping Canada where the first prize in a national lottery has risen this week to a record \$10m (£5.7m). There has been no first prize winner in the lottery for six weeks—and excitement has been mounting in line with the tax-free cash on offer.

"It has caught the imagination of everybody," says Norman Morris, certified accountant and president of the corporation which runs the lottery to raise money for the 10 provincial governments.

When the potential jackpot reached C\$7m last week, almost C\$38m worth of one dollar tickets were bought across the country. Funners began to swap tickets, often overloading the computer system designed to register sales.

In a two-hour period this week, C\$500,000 worth of tickets were sold. People queued for up to 30 minutes to buy tickets at booths in stores and shopping

centres, disrupting everyday trade.

The lottery has made a useful though modest contribution to provincial governments' revenue. In Ontario last year, it amounted to C\$163m out of a total budget of C\$20bn. But last week Ontario raked in nearly three times its normal share.

Radio chat-shows are now buzzing with views on the potential psychological effects on anyone who might scoop the full C\$10m prize.

### Eyes open

"It's not a garden-shed operation," rejoiced Peter Davey, the Oxford University research engineer who is about to become managing director of Meta Machines.

Davey has got nearly £800,000 from investors—some from the university—to back his inventions for putting more intelligence into factory machinery. He invents "eyes" for robots which can follow a process even into conditions as hostile as a welding arc.

And he has persuaded Martin Wood, the successful Oxford entrepreneur, to come on to his board. Wood is chairman of Oxford Instruments, a company born at the bottom of his garden, while he was still working as an engineer in the university. "We're hoping that a bit of its magic will rub off," Davey says.

Meta Machines starts life with some impressive backers. Baronsmead Associates, which put together the finance, is backed by N. M. Rothschild. The robotics research at Oxford has had support from BL, GEC and Fairley.

Davey's own career has been one of successful technology transfer from university to industry. For nearly four years he has been managing the government's robotics research programme, as well as supervising his own speciality.

### Irish ties

The late Arthur Koestler's 1946 description of terror-wracked Palestine as "John Bull's Other Ireland" took a topical twist this week with the Israeli embassy's frantic efforts to dissociate itself from a tour of the Lebanese border by members of the Rev Ian Paisley's Democratic Unionist party.

But unlikely links between Ulster and Israel continue to pop up. In order to boost its flagging popularity in Britain, Israel has just appointed a fast-talking Ulsterman as its Minister for Public Affairs in London.

He is Yaakov Morris who, like Israeli President Herzog, was born in Belfast. One of his country's most articulate and colourful debaters, Morris must have kissed several bribery stones before settling in Israel 36 years ago.

### Airway

The new £60m Birmingham International airport, was handed over to West Midlands County Council yesterday three months ahead of schedule — by John Laing Construction.

But none of the celebratory platform party gave a public audition to the 58-year-old lady without whose co-operation the project would have been seriously delayed.

Her house stood on the site now occupied by the new terminal building — and she did not want to move.

Alan Hope, leader of the then Conservative-controlled council, chortles now at the efforts that went into changing her mind.

### Just desserts

With judgment pronounced by the court in the case of "President's Pudding," Swiss criminologists have lost a plangent after-dinner topic of discussion.

The corpus delict was an allegedly illegal dessert served to Francois Mitterrand, the French President, during a short visit to Neuchâtel last April. The controversial delicacy was called "soufflé glace à la fee," a name that suggested it contained a measure of absinthe, the "Green Fairy" of Neuchâtel moonshiners.

Absinthe has been illegal in Switzerland since 1910. And Daniel Aymone, mine host of the patrician palas in which the gala meal was served, claimed he had used a (legal) absinthe from the neighbouring canton of Fribourg.

The court conceded that it could not be proved that absinthe was used in the soufflé. But Aymone still received a suspended sentence of four days imprisonment—for fraud.

In the eyes of the law, "fairly" is synonymous with absinthe for the average Neuchâtelois, so the pudding was "not un to the promised quality."

### Observer

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"Now let me get this right—we're striking against the strike that was against the overtime ban that was against pit closure..."

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ECONOMIC VIEWPOINT

The problem of competitiveness

By Samuel Brittan

HOW FAR is the international competitiveness of British industry and commerce an obstacle to the continuation of economic recovery at the 3 per cent rate projected by the Treasury or at the somewhat higher rate necessary to make a serious dent in the unemployment levels?

In 1983 total domestic demand in real terms rose by 4 per cent according to official estimates; but output rose by only 3 per cent. This was because a substantial amount of the demand increase was siphoned off into imports which rose by 5 per cent in volume terms. Exports, on the other hand, rose by only 1 per cent.

In 1984 the Treasury expects a different picture. Real domestic demand is expected to rise only by 3 per cent—less than last year. Imports are expected to rise at the same speed as in 1983. The big difference is expected to be in exports, which are projected to grow at 4 per cent. Thus, despite a slower increase in domestic demand, output is again expected to grow by 3 per cent.

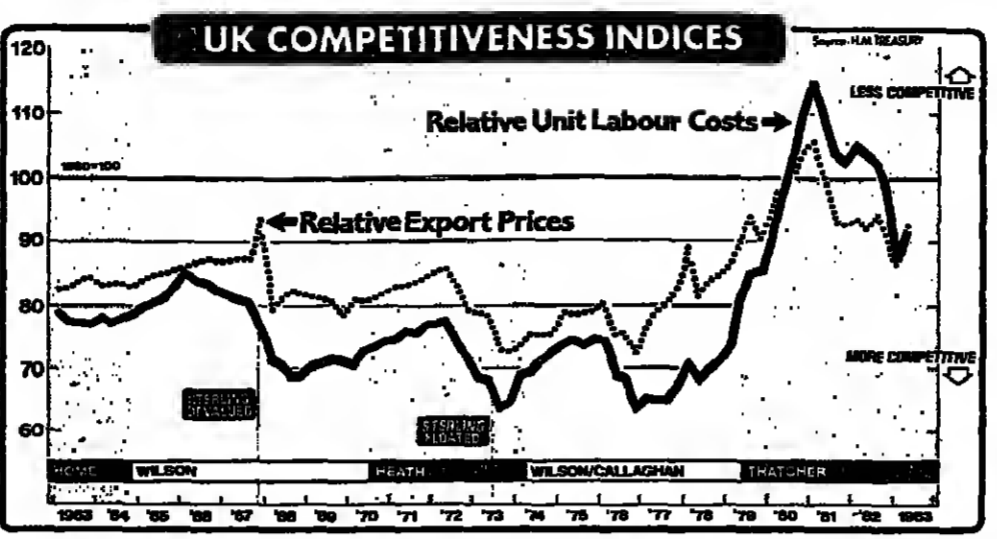
How realistic are these official hopes that exports will move forward and imports remain on their 1983 trend? International performance depends on two main factors, apart from British industry's ability to supply the goods. These are the growth of world markets and the competitive position of British goods, both in export markets and in competition with imports at home.

in world trade, measured in terms of volume, has been roughly stable since 1981, despite the high level of the real exchange rate.

It is this last topic that has caused so much controversy. The real exchange rate is simply the exchange rate after allowing for international cost and price movements. A downward movement of the real exchange rate means that British goods are more competitive; and an upward movement that they are less.

While financial commentators who study the nominal dollar-sterling exchange rate over the past three years are impressed by the apparent fall in the pound, those who look at the trade-weighted index in real terms believe that sterling is still too high. People who worry about the real exchange rate and indices of competitiveness tend to argue for a conscious policy to bring about a depreciation of sterling; or if that is thought unwise, at least measures such as the abolition of the employers' National Insurance Surcharge (NIS).

Advocates of depreciation usually encounter the argument that the benefits will run to waste in higher inflation and that any gain to competitiveness will soon be eroded by the rise in British costs.



competitiveness is assumed to be more normal. One frequent index, plotted in the chart, is relative export prices (adjusted, of course, for exchange rate changes). But price indices can underestimate changes in competitiveness. A British company may have to hold prices down to meet international competition. In that case, it will experience a deterioration in competitiveness, in the form of more rapidly rising costs than its competitors, and reduced profit margins.

Indeed, the index most frequently used to show how uncompetitive British products are is the index of relative "normalised" unit labour costs. The term "normalised" simply means that the trend of productivity is used to estimate costs and very short-term fluctuations are ignored. The starting point for such comparisons is usually either 1975 or 1978, to avoid the depressed exchange rate prevailing in the 1976 sterling crisis and its aftermath.

If we start from 1978, the index of "normalised" UK

All that a longer-term look at the indices can do is to introduce a little calm and patience. It suggests that any official move to tighten money to prevent too rapid a fall in sterling, undertaken for counter-inflationary reasons, is hardly likely to strangle the British recovery.

Over still longer periods, covering one or more business cycles, the movements of so-called competitiveness indices reflect basic trends in the product and labour markets and are not easily amenable to official policy.

It is less certain what has happened since. It is possible that the non-price elements have stopped deteriorating; they may be even improving. The big bonus from North Sea oil, which has (together with the recession) accommodated the competitive deterioration since the late 1970s will not, however, recur.

It is thus extremely unlikely that Britain can afford any further deterioration in competitiveness as measured even by the imperfect labour cost index. The main question is whether the present level of measured competitiveness is sustainable, or whether a net improvement (which would be shown in the chart by a falling line) is required.

EXPENDITURE AND GDP: TREASURY FORECASTS. Percentage increases on a year earlier. Table with columns for 1982, 1983, 1984 and rows for Domestic demand, Exports of goods and services, Imports of goods and services, Domestic production-GDP at factor cost.

Letters to the Editor

Governments, trade unions and voluntary codes

From Sir Leonard Neal. Sir—I read with sadness and interest the account by John Lloyd (January 3) of the Government's apparent intention to dilute still further its electoral promises on trade union reform.

"agreements" take the form of "understandings" or, in recent years, of "codes of practice" that the trade union militants receive and examine with joy, and either then ignore or wilfully misconstrue.

between governments and the TUC, and so it has been with the so-called codes of behaviour including the TUC's own variety and Mr Prior's codes on picketing, as we have seen in the recent violence at the Stockport Messenger.

Abolishing national insurance

From Mr E. Whiting. Sir—Following the letter from Sir Alec Atkinson (December 31) in the defence of Samuel Brittan (December 22) and his plea for the abolition of national insurance.

Long haul for Ivory Coast in the reseeded club. At the beginning, he refers to the country suffering the worst drought for 25 years. This is not in the least surprising and in fact is utterly predictable.

Nigeria—time to act. From the Chairman, Cottee Export. Sir—There is much talk in government circles and financial journals about the importance of the Nigerian market to the United Kingdom, but as all informed businessmen dealing in this market are aware, Nigeria is now greatly in arrears in repaying its debt for goods or services properly rendered by exporters etc. from this country.

Africa's sponge of life

From Mr S. Meredith. Sir—In your issue of Dec 23 you carried a short article by Peter Blackburn in Abidjan—

Edwin Whiting. Shudehill House, Hayfield, via Stockport, Cheshire.

Stephen Meredith. 5, Rutlish Road, SW19

The Ebic banks bring strength and experience to your financial operations

Over the past 20 years, the Ebic banks have been co-operating with each other in order to offer services which are both innovative and dynamic to their national and international customers. Their expertise has benefited small, as well as large businesses, importers, exporters, international organisations, states and, indeed, governments.

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Hong Kong shares boosted by Peking statement

By Robert Cottrell in Hong Kong HONG KONG share prices rose sharply again yesterday after Peking's senior representative in the British colony gave assurances over the future of its capitalist system.

The Hang Seng index advanced by 21 points yesterday to close the half-day session at 904.7. It has risen by almost 11 per cent in the past seven days.

Xu Jiann told a meeting of Hong Kong university academics that China would maintain Hong Kong's capitalist system for 50 years after 1997, the year in which Britain's lease over most of the colony expires.

Although he was only repeating a pledge that has been made in recent months by Peking officials, including Ji Pengfei, director of Peking's Office of Hong Kong and Macao Affairs, it was obvious that investors interpreted his remarks positively.

Meanwhile, it was announced in London that Sir Edward Youde, the colony's governor, would return to the UK for talks with Mrs Margaret Thatcher, the Prime Minister, and other senior ministers early next week.

The talks are in preparation for the resumption of discussions between Britain and China on the colony's future due to take place in Peking on January 25 and 26.

The share price surge coincided with further good news on the colony's economic prospects. According to a newly published paper from the Hongkong and Shanghai Bank's economic research department, most aspects of Hong Kong's economy will improve in 1984.

The bank, in the January edition of its economic report, says "the efficiency of (Hong Kong's) industry has remained virtually unimpaired" by political uncertainty over the territory's future, and that the export revival seen in 1983 should strengthen through 1984.

Hong Kong is expected to have met government forecasts of 5.5 to 6 per cent real growth in its gross domestic product in 1983, largely thanks to its strong export performance.

In value terms, domestic exports for January-November 1983 were 25 per cent higher than those of the comparable period of 1982.

The Hong Kong bank says: "The recovery in exports is expected to spread to other sectors, with the result that economic performance in 1984 will be superior to 1983."

The bank also argues that Hong Kong's inflation rate will drop sharply in 1984, reflecting falling property rents and the linking of the Hong Kong dollar to the U.S. dollar, which began in October.

In November, inflation - measured by consumer price indices - was running locally at some 11 per cent. The bank forecasts that the rate might fall to 6 per cent in 1984. Market report, Page 29; Background, leading prices, Page 32

China, U.S. in dishwasher link

By Our World Trade Staff CHINESE and U.S. companies have signed a long-term deal for the largest production in China of dishwashers designed for the U.S. market. The contract extends over a 15-year period and could eventually be worth \$490m.

Approved by the Chinese Ministry of Aerospace and Astronautics Industry, it involves a production arrangement between Hart Industries of Salt Lake City and the China Great Wall Industry Corporation. Under the deal, China Wall would produce up to 500,000 non-electric Hart dishwashers a year, which would be sold in the U.S.

Mr Stephen Smoot, Hart's president, said the dishwashers would be manufactured at a site in Shun Chung, an industrial zone in Guangdong province, near Hong Kong. China Wall is to transfer 100 technicians from Shanghai to direct the manufacturing.

South Korea rejects tripartite talks offer

BY JUREK MARTIN, FAR EAST EDITOR, IN SEOUL

SOUTH KOREA yesterday rejected offer of hand a Chinese-backed North Korean proposal for tripartite talks on the future of the divided peninsula, with the U.S. serving as the third party.

After a state dinner for Zhao Ziyang, the visiting Chinese Premier, in Washington on Tuesday night, President Ronald Reagan appeared to align himself with the South's position by countering with a proposal for four-way talks to include China. On the other hand, Chinese Foreign Ministry officials in Peking came out last night firmly behind the North's original offer.

Nevertheless, the North Korean offer could represent an important policy change in that it is the first time the country has proposed publicly the inclusion of South Korea in any proposed negotiations with the U.S. since the 1953 ceasefire which ended the three-year Korean War.

The South, however, obviously fears that tripartite negotiations might simply result in the U.S. and the North dealing directly and squeezing out the South. There is also a profound and understandable

mistrust in the South about the motives and timing of the North's offer, with one senior Minister dismissing it as "insincere".

The proposal comes only three months after North Korean terrorists planted the Rangoon bomb that killed 17 South Korean officials, including several Cabinet members, and which almost claimed the life of President Chun Doo Hwan.

Western diplomats in Seoul said last night that, while the North's offer was its first public commitment to talk directly to the South, it was not the first. The plan was originally passed to the South through Chinese diplomatic channels on October 8, the day before the Rangoon bombing. The offer was repeated in December and was indeed implicitly rejected by South.

Why the North has persisted with its proposal is a subject of much discussion in Seoul. One theory is that the North, almost certainly with Chinese prodding, perhaps as a result of the recent accession of a new and reportedly sophisticated Foreign Minister, has come to realise

that it needs to repair an appalling international image which was further blackened by the Rangoon bombing - for which it has never admitted responsibility.

For its part China may regard the continued risk of war between its ally in the North and Washington's partner in the South as an unnecessary obstacle to its relations with the U.S.

A counter-theory, also plausible, is that the North wants to nip in the bud the flower of warmer relations between South Korea and China, calculating that Peking may be disappointed by the brusqueness of the South's rejection.

There is also speculation that North Korea may be trying to play on the electoral need of President Reagan for the sort of foreign policy success which he is generally seen to be lacking.

Though Mr Reagan may be happy to give the appearance of being positive about the idea of talks, however, it is obvious that the problem and Lebanese dimensions in their intractability.

More French steel and coal jobs cut

BY DAVID HOUSEGO IN PARIS

FURTHER large-scale redundancies in the French steel and coal industry were announced yesterday.

Saciol, one of the two state-owned steel groups, said it would shed between 1,600 and 2,000 jobs at its Solac subsidiary in Lorraine, which makes flat products. That is in addition to the 6,500 jobs already earmarked to be cut under the existing French steel plan.

At the same time, the Centre-Midi regional division of the state-owned coal industry announced that it would shed 1,162 jobs. That is in addition to the announcement earlier this week of 2,000 job losses in the Nord-Pas de Calais region.

The Midi contains some of the most unprofitable mines in France.

The new redundancies form part of growing job losses in the ailing sectors of French industry as the Government pushes through its restructuring plans.

The Solac management said the redundancies in Lorraine were caused by a downward revision of flat product output from 3.7m tonnes by 1987 under the steel plan to 3.2m tonnes. The redundancies will occur between now and 1987.

Lorraine steel production is among the costliest in France because of the low quality of local mineral ore. Restructuring in the steel industry is being accelerated by the Government's refusal to meet the industry's demands for additional financial assistance. The industry has said it would need an additional FFr 12bn (\$1.39bn) in 1984.

Nippion steel to boost output, Page 4

British Rail to reduce workforce by 3,500

By John Lloyd and Hazel Duffy in London

BRITISH RAIL Engineering (BRE), the wholly owned manufacturing subsidiary of British Rail, is to make some 3,500 workers redundant over the next year.

The cuts, which will reduce its present 27,300-strong workforce to under 24,000, are a result of a considerable reduction in BR's forecast equipment needs, and the necessity for BR to cut costs if it is to operate within the strict financial discipline being imposed by the Conservative Government.

A more immediate problem has been the failure of a £23m (\$32m) order for wagons and other rolling stock placed by the Congo railways with BRE last year.

The Congo authorities have since reduced the size of the order, but BRE is still waiting for the order to be activated.

The largest single group of workers to go will be at Shildon works, in County Durham, North-east England, where 962 workers are to lose their jobs over the next six months.

The closure of the plant had been widely forecast, although BRE had given the plant a six-month "stay of execution" last year in an ultimately unsuccessful attempt to find new work for it.

The company is also to make 750 workers redundant next month from plants at Derby, Doncaster and Swindon as a result of ending a programme of stripping asbestos from diesel multiple units. The estimated savings from ending this exercise - a decision likely to be exploited by the unions on health and safety grounds - is £14m.

Swindon is to suffer a further cut of 550 workers in the course of the year, because of a lower workload than expected from export orders. The plant is to lose a total of some 1,200 workers over the next 12 months.

BR has begun in the last year to put out to competitive tender orders for locomotives and rolling stock for the first time since BRE was formed in the late 1960s. Orders for prototype replacements of DMUs (diesel multiple units) and an electric version of the High-Speed Train diesel locomotive have been placed with Metro-Cammell, GEC and Hawker Siddeley over the past year, as well as with BRE.

The policy change, which came about partly as a result of government pressure, is forcing BRE to try to win orders in the highly competitive world markets for rail equipment. Many of those markets are in developing countries.

Tension eases as production resumes at Poissy

By Paul Betts in Paris

WORK resumed yesterday at the troubled Talbot car plant at Poissy, outside Paris, which has been paralysed by a labour dispute of unusual intensity since the beginning of last month.

That followed talks between Peugeot, the French private motor group which owns Talbot, the labour unions and the left-wing administration to break the deadlock over the car group's controversial redundancy plans for Poissy.

The talks produced no overall agreement over the redundancies but helped to clear the air, enabling a resumption of dialogue between all parties after last week's violent clashes.

Peugeot had attempted to resume production at Poissy last week. However, it was forced to close the plant after the clashes between militant workers there.

In an effort to avoid the risk of new clashes, Peugeot has decided to resume production at Poissy in stages. Production initially started yesterday with the Talbot Samba model. The company hopes the plant will be again in full production by next week, with output of 1,000 cars a day.

Although the company is not turning back on its decision to make 1,900 workers redundant at Poissy, it has adopted a more accommodating approach in its latest talks with the unions. Peugeot now appears willing to make concessions on union demands for more adequate job retraining and compensation provisions for workers made redundant.

The most significant factor in easing the tensions in the Poissy dispute has been the decision of the pro-Socialist CFDT union to suspend its strike at the Talbot plant.

From the beginning, the CFDT has been the most militant of the unions at Poissy. However, with the growing risk of a permanent shutdown of Poissy, the violence last week, and the rising chorus of criticism against the union, the CFDT has been backing down from its earlier intransigent line.

None the less, the CFDT has continued to attack the left-wing Government's industrial policy in the last 48 hours as well as its rival pro-Communist CGT union confederation.

Despite yesterday's return to work, the situation at Poissy continues uncertain, especially after the outburst of racial violence last week at the plant, where immigrants account for more than half the workforce.

In the talks between the company, the unions and the Government, which lasted until late Tuesday night, the Government again proposed to offer North African immigrant workers a repatriation allowance of FFr 40,000 (\$4,830) each. That is double the existing allowance, but well short of the FFr 200,000 some Poissy immigrant car workers have demanded recently.

Among other proposals tabled by the unions and the administration at the meeting are commitments to find other jobs in the Paris area for workers made redundant at Talbot. The CFDT is still insisting that Peugeot change the 1,900 redundancies into three-month temporary layoffs to give all parties more time to work out a more suitable solution.

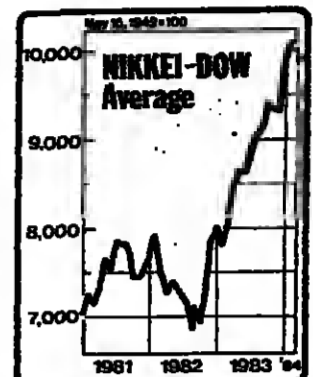
The French car makers' association yesterday reported domestic car registration figures for 1983. As expected, registrations again topped 2m, but the total of 2,061,501 is 1.8 per cent lower than the record 2,098,490 registrations of 1982.

Foreign car makers increased their penetration of the French market with a 22.7 per cent share, compared with 20.8 per cent in 1982. Of the French car groups, Renault saw its share of the domestic market fall to 35.1 per cent, Citroën's to 22.8 per cent and Talbot dropped to 4.5 per cent.

Talbot saw its registrations drop by 19.5 per cent last year to 89,862 cars.

U.S. car industry's slim lines, Page 14

THE LEX COLUMN Tokyo scales a new peak



Tokyo's Nikkei-Dow average ended 1983 within a whisker of 10,000 and, as the leading Japanese securities houses entered the new year distributing buy recommendations like coffee, a break into fresh territory was merely a matter of time.

This week the index duly glided into five figures and yesterday's further 58-point advance suggested that the market now views 10,000 as a base level.

The index has now been rising almost without interruption for over a year and has displayed a remarkable sang-froid in the face of potentially unsettling news. Japanese investors have taken the occasional hiccup on Wall Street in their stride, while the initially disappointing outcome of last month's election caused barely a tremor.

With foreign investors adopting a fairly neutral stance towards the market, the domestic institutions are no longer looking so nervously over their shoulders and have latched on to the cyclical recovery in corporate profits as a justification for rising equity values.

The basic industrial sectors - in particular chemicals and textiles - have comfortably outperformed the high-technology companies over the past two months.

A more stable yen/dollar parity is now allowing lower oil prices to feed through into operating costs and the general expectation is that, as consumption and capital formation are at last showing some worthwhile growth, capacity utilisation should also be improving.

Against that background, worries about an increase in the corporation tax rate and a tighter monetary environment have failed to shake confidence. Yet although the domestic economy should this year be contributing far more to GNP growth, the pace of the U.S. recovery - and access to the North American market - remain important determinants of stock market performance.

Tokyo has not shrugged off Wall Street quite yet.

Asda

If things had failed to go Asda's way in the middle of a retailing boom, there would be some awkward questions for the group to answer. In fact, the 47 per cent increase in pre-tax profits, to £48.7m for the 26 weeks to mid-November, was considerably better than par for the course - and substantially

better than Sainsbury managed to achieve over roughly the same period.

There are, however, some aspects of this excellent performance which Asda cannot reasonably hope to repeat. For a start, its ill-starred furniture and carpet retailing ventures have swung nicely into the black, and although there is still work to do on the cost base at Allied Carpets, the probability of similar margin improvements must be limited.

More significantly, the unplanned bulge in store openings at the start of last financial year has now worked its way through in the shape of a £4m boost to first-half profits.

Despite these qualifications the combination of rapid geographical expansion and volume growth in existing stores is impressive. Food volume appears to have risen by 3 per cent on a like-for-like comparison, only to be outpaced by 6.7 per cent increase in non-food, leading to a higher-margin mix. Increased fresh food sales are also serving to enrich the sales cocktail.

Unless the Treasury decides at some point to rein back consumer spending, there seems little to stop Asda topping £100m pre-tax this year; at yesterday's 1983, the prospective multiple is about 16, much more akin to Sainsbury than Tesco.

There is also little chance that the cash pile will stand much below £100m, even after £70m of capital expenditure using cash is apparently Asda's nearest approach to a problem.

Magnet & Southern

While the recession was gnawing into the timber companies Magnet acquired the reputation of being pest-proof. That was never quite true. By 1982 profits were down by

a quarter from their 1980 peak. Now comes the recovery - pre-tax profits for the six months to September are up 43 per cent at £17.3m, and at least as good a showing is on the cards for the second half.

The rights issue of last March will add a notional £3m or so to the full-year figure, but the business proper is maturing as well. Real personal disposable incomes - the key to Magnet's performance - showed their first upturn last March, and Magnet in response has opened 13 new depots in the first half, with five to come in the second.

Factory utilisation is about 70 per cent, so more volume can be handled, and more capacity is going in besides - especially in kitchen units, where Magnet's first-half volume doubled on last year.

The margin improvement has much to do with capacity utilisation, little with pricing. Timber costs are up about 30 per cent, but Magnet's prices by only 4% per cent in an aggressive push for market share.

Full-year profits should run out at £38m, which puts the shares, at 160p, on a prospective multiple (actual tax basis) of 18. With this year's recovery out of the way, next year's growth should be solid, but less fancy.

Markets

An early alert was sounded in the London markets yesterday for signs of a reaction to the post-Christmas binge: nothing so simplistic as a winter weather boost for fuel costs, therefore, was going to be allowed to explain away a 3.4 per cent jump in the producer input prices index for December.

The figure helped depress share prices across the board and gave gil-edged stocks their worst day for many weeks.

Anyone making the case for a rather longer-term reaction in equities should now have little difficulty in finding an audience. The market has been uncomfortable this week at the sight of Wall Street straining itself in vain to push the Dow Jones Industrial Average past last November's closing high, and the latest money supply figures have been a salutary reminder of the inflationary implications of the consumer boom.

At least sterling's decline against the dollar has so far added little to the pressure for high interest rates now gathering in the domestic money markets.

Giscard makes angry attack on Mitterrand

BY DAVID HOUSEGO

FORMER president M Giscard d'Estaing last night said that his successor, President Mitterrand, is no longer "qualified to represent the unity of France".

In an angry defence on French television of his role in the "oil sniffer aircraft" affair he said that the Socialist had come to office through a lie and sought to maintain himself in power through lies.

It was one of the strongest personal attacks on President Mitterrand by a senior politician of the Opposition and a deliberate abandonment of the courtesy that would normally be expected between two presidents.

M Giscard d'Estaing justified it by pointing to what he considered as malicious attacks on his reputation and on that of other members of his administration made by President Mitterrand and his Government. He said that Mitterrand had "lowered the name of France".

M Giscard d'Estaing denied that an attempt had been made to cover up the truth or that there had been any fraudulent use of funds.

The former head of the Joint Chiefs of Staff, Lt-Gen Alvaro Lacalle Leloup, was retired earlier this month from the post, which is now obsolete.

The new nominations, which also include changes in several regional commands, come just before the trial by court martial of four officers who are accused of plotting an army coup on the eve of the October 1982 general election.

The court martial, like the retrial last year of soldiers and civil guards who tried to overthrow the Government in 1981, threatens to provoke a resurgence of bitterness between politicians calling for still punishment and extreme right elements in the armed forces.

Continued from Page 1

named new men as chiefs of staff of all three services.

This means that Lt-Gen Ramon Ascanio, the Army Chief of Staff, who started as a favourite for the new defence job, has been moved out of the top hierarchy. That is believed to be a consequence of comments he made calling for a more gradual approach to planned manning reductions in the army.

Lt-Gen José Saez de Tejada, commander of the Madrid military region and one of the army's most respected officers, has been appointed army chief of staff. Admiral Guillermo Salas as the new navy chief, and Maj Gen José Santos Ferralba, a close associate of Defence Minister Sr Narciso Serra, to the senior air force post.

Madrid shakes up its top military hierarchy

Continued from Page 1

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Continued from Page 1

NS00 (\$860) annually to N100 (\$135).

The foreign exchange allowance for business travel of £2,500 for each company has been "suspended until further notice".

No foreign exchange is to be made available for medical treatment outside Nigeria unless a request is supported by the chief medical officer of the state in which a patient lives.

Nigerian students already studying abroad will still receive a foreign currency allowance, but no foreign exchange will be made available to new students wishing to study outside the country.

The central bank warns that although the existing rate for management and technical services will remain at 20 per cent of net profits, payment abroad will now only be allowed in "exceptionally deserving cases" such as manufacturing companies reliant on high technology.

As part of the new system for rationalising import controls, commercial and merchant banks will become authorised foreign-exchange dealers. They are to be given a 1984 foreign currency ceiling based on previous remittances and no bank will be allowed to exceed a twelfth of that quota in any month. The foreign currency ceiling

Nigeria seeks to assess trade debts

Continued from Page 1

will cover payments for imports and invisible payments such as dividends and travel allowances.

An important development is the reduction in the buying commission paid to agents and confirming houses acting as an intermediary between importers and exporters from 4 per cent to 2 per cent of the free-on-board value of the consignment. Bankers here say the commissions have often been used as a means of siphoning funds out of the country and directing unnecessarily large agency payments to middlemen.

The circular details credit guidelines for Nigerian banks in 1984.

World Weather table with columns for location, temperature, wind, etc.

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SECTION II - INTERNATIONAL COMPANIES

FINANCIAL TIMES

Thursday January 12 1984

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U.S. OIL GROUP CONTINUES WITHDRAWAL FROM EUROPE

Kuwaitis buy Gulf Italy assets

BY RICHARD JOHNS IN LONDON

GULF OIL has reached agreement in principle with the Kuwait Petroleum Corporation (KPC) on the sale of its Italian assets, which include 1,500 petrol stations and a moth-balled refinery.

The deal will double the number of KPC's marketing outlets in Western Europe following its takeover last year of Gulf Oil's interests in the Netherlands, Belgium, Luxembourg, Sweden and Denmark.

The 1,500 stations represent about 3 per cent of the Italian market. Operations at the refinery at Sarni, near Bertinoro, with a capacity of 75,000 barrels a day, were suspended about two years ago.

Neither Gulf nor KPC would put a figure on the cost of the deal, but it is believed that part payment in crude oil may be involved. The final agreement is subject to the signing of definite contracts and executive approvals, according to a statement from KPC.

KPC is believed to have reached

agreement with Gulf in opposition to Tamolil Spa, a predominantly Arab-owned company which last year acquired Amoco's interests in Italy.

A Kuwaiti takeover of Gulf Italiana Spa would reduce the U.S. oil major's European marketing and refining interests to the UK, where

it has 400 stations, its refinery at Milford Haven and 35 per cent in the associated catalytic cracker there.

Last year KPC demurred at purchasing Gulf's Italian assets, largely, it seemed, because of its interest in the Sarni refinery.

Royalty trust rejected

GULF OIL has dismissed a proposal from an investor group led by Texas oilman Mr T. Boone Pickens, that it should spin off some of its oil and gas producing properties in the form of a royalty trust.

Gulf Oil has clashed with Mr Pickens, who owns 13.2 per cent of its shares, on several occasions, but this marks the first time it has formally stated why it opposes his royalty trust suggestion.

Gulf says there are four main problems with the Pickens proposal. It would confront most Gulf shareholders with several tax pitfalls, it would put the value of

Gulf's shareholders' investment at great risk because of the forced selling of the company's shares likely to result from the adverse tax consequences; it would deprive Gulf's operations of cash flow, making them less competitive and reducing shareholders' potential for significant capital gains and dividends; the proposal includes possible future income in the trust from a portion of Gulf's undeveloped oil and gas properties, which would impose a serious economic penalty on future investments in oil and gas projects and hence reduce share value for the remaining company.

Fabrique Nationale to seek job cuts

By Paul Chesswright in Brussels

FABRIQUE NATIONALE, the Belgian arms and aeronautics group, starts negotiations today with the trade unions on how to reduce the size of its workforce so it can find a balance between the number of people it employs and its likely level of production.

This year it wants to reduce by 10 per cent its workforce of 9,200. Some 450 people are expected to leave through natural wastage and existing early retirement plans.

The company wants to settle terms with the unions for the departure of a further 450.

Disclosure of these plans came as FN revealed that for 1983 it expected roughly to break even on a turnover of BFr 23.6bn (\$41.1bn), slightly less than it had expected.

FN expects production and sales this year to be slightly lower. The international aeronautical industry remains depressed, while arms sales have been hit by the reduced availability of funds generally for defence purposes.

The group's position is probably worse than the turnover figures for 1983 suggest. There was a surge in sales during the second half as FN sorted out inventory and invoicing problems. The sales did not reflect any build-up in production.

In addition to the reduction of personnel, the management is seeking to cut costs and it may sell off parts of its business outside the mainline activities of defence, aeronautics, sporting goods and office equipment.

But it will not be until 1985, according to FN estimates, that sales growth and improved profitability will start to come through.

Final figures for 1983 are expected in March. In 1982, net profits were reduced to BFr 8m from BFr 102m the previous year.

Lower fuel costs and cutbacks enable Air France turnaround

BY PAUL BETTS IN PARIS

AIR FRANCE expects to break even and possibly earn a slim profit for 1983 after heavy losses of FFr 792m (\$92m) the year before. Concorde will also report a small operating profit in 1983 for the first time since the French state-owned airline started supersonic services in January 1976.

The French airline confirmed yesterday this significant turnaround in the company's financial performance last year. However, a company official said it was still too early to say whether the 1983 figures would show a small profit since the airline was still closing its accounts, but acknowledged that Concorde had operated profitably for the first time last year.

Air France has now reduced its supersonic services to one daily Paris-New York flight and charters. It has also decided to use three of its seven aircraft Concorde fleet to provide spare parts for the other supersonic aircraft in service.

The airline's overall financial improvement has not entailed any reduction in the number of aircraft in its fleet.

The stronger financial performance last year reflects the company's success in adjusting its services and capacities to market demand. At the same time, it has benefited from lower fuel costs although these have been offset in part by the rising U.S. dollar.

However, the strong dollar has in turn boosted traffic to France and thus offset for its part the impact of the French Government's travel restrictions introduced as part of

the austerity programme last spring. These measures, designed to discourage French nationals from taking their holidays abroad, have now been eased considerably by the Government.

An Air France official confirmed yesterday that the strong improvement to performance had been consolidated in the last quarter of last year. In October, M. Pierre Giraudet, Air France's chairman, indicated the company was expecting "a strong reduction" in its losses in 1983, but with the improved trend continuing in the last months of the year, the company is now anticipating break-even.

The other two French airline companies, Air Inter and UTA, are also expected to show small profits for 1983.

French expansion for Stet electronics unit

BY DAVID MARSH IN PARIS

SGS, the Italian semiconductor manufacturer which is owned by the Italian telecommunications group Stet, is spending an overall \$50m in expanding its Rennes manufacturing facilities in north-west France.

Sig Pasquale Pistorio, the company's chairman, said in Paris that the investment, spread over several years, would enable SGS to boost its supply of specialised electronic components to the French defence and telecommunications industries.

At present SGS has about FFr 150m (\$17.4m) worth of business in France and imports semiconductors into the country to meet part of customers' needs. By the time the expansion of the Rennes plant is completed - which could take three or four years - SGS would be a net exporter of integrated circuits from France. Its aim is to build up its share of the French semiconductor

market, dominated by companies like Thomson and Motorola, from the present 4 per cent to 7 per cent over the medium term.

SGS, which has 10 overseas subsidiaries, has made a particular effort to attack the U.S. market, where sales last year amounted to \$66m or roughly 30 per cent of total turnover. Sig Pistorio said the company aimed to boost U.S. sales to \$200m by 1985.

Included in the company's semiconductor sales from France to the U.S. are high-reliability components for use in satellites made by Hughes, the California-based aerospace company. Principal clients in France include CIT-Alcatel, Thomson, Matra and Philips.

Sig Pistorio said the French expansion would increase the company's opportunities for winning orders from French state-owned groups.

Rey pulls out of S&L deal

By Our Financial Staff

MR WERNER REY, the Swiss financier, has withdrawn from a deal that would eventually have given him a 26 per cent stake in Beverly Hills Savings and Loan - a Californian institution with assets of about \$1.6bn.

Mr Rey already has 8.9 per cent of the stock, just under the 10 per cent for which special permission is needed. But he had undertaken to assume a subordinated debenture of \$20m, which would be convertible into 833,333 common shares at an equivalent price of \$24 each. Conversion would have raised Mr Rey's stake to 26 per cent.

S&L said yesterday, however, that Mr Rey had announced he intended to withdraw the necessary "Change of Control" application previously filed with state and Federal regulators in connection with his attempt to raise his stake beyond 10 per cent.

Murdoch sued by Warner

By Our Financial Staff

WARNER Communications, the troubled U.S. leisure group, has hit back in its battle with Mr Rupert Murdoch, the Australian publisher, by filing a suit to block further purchases of Warner stock by the Murdoch group.

Warner said the suit was filed in a Delaware district court against Mr Murdoch, News Corporation Holding, News International, Crusen Investments, and Stanley S. Shuman, Mr Murdoch's investment banker.

The company said the suit alleged that the defendants violated Federal securities and state law in connection with News Corporation's purchase of a 7 per cent stake in Warner.

The suit is a reply to Murdoch's move last week to block the proposed link between Warner and Chris-Craft Industries. Mr Murdoch contends that the link is not in the best interests of Warner shareholders.

Mr Murdoch has given official notification that he may buy up to 49.9 per cent of Warner. However, if Warner's deal with Chris-Craft goes through it will complicate matters for him because of the regulations on cross-ownership of television stations, which Chris-Craft operates, and newspapers.

U.S. glass maker to acquire 48% stake in Spanish group

BY DAVID WHITE IN MADRID

GUARDIAN Industries of the U.S. has agreed to take a 48 per cent stake in Spain's Vidrieras de Llodio.

The move is aimed at financing the construction of a new float-glass facility to help the Spanish concern compete with the French Saint-Gobain group, which dominates the Spanish glass industry.

Vidrieras de Llodio, the only major producer not controlled by Saint-Gobain, holds about a third of the market.

Guardian, which is to invest \$15m in new shares in the Spanish unit, pulled out two years ago from a joint venture which had given it a joint control of Vidrieras de Llodio.

The investment is one of the biggest made by a foreign company in

the Spanish Basque country since the sharp increase in separatist violence there in recent years.

Sr Carlos Delclaux, chairman of the Spanish glass maker, said the new float-glass unit should be completed by mid-1985 at a cost of Pta 530 (\$31m), using the company's current facilities.

This was considerably cheaper than the company's initial proposal for using a greenfield site, he said.

He added that the company, which showed a net loss of Pta 600m in 1982, made operating profits of some Pta 200m last year. These however will be wiped out by write-offs, particularly as a result of last summer's flood disaster in the region.

The company, which employs 1,100, had sales of about Pta 9bn last year. Its capital has up to now been shared by various family groups.

Guardian, the maverick of the world flat glass industry, has grown from a small Detroit family business in the 1960s to become the fourth largest flat glass maker in the U.S. and one of the top 10 in the world.

It started building its first float glass plant in the U.S. before taking out a license from Pilkington Brothers of Britain for use of the process, and it is still contesting the validity of Pilkington's patents on the float plant of its Luxembourg subsidiary, started two years ago.

Share sale plan for Burmeister

By Hilary Barnes in Copenhagen

BURMEISTER & Wain, the Copenhagen shipyard, might be the subject of a share flotation by the trustees for the bankrupt estate of the B & W group.

The launch, which would probably consist of a limited number of shares will require the approval of the Danish Government, which is currently holding the shares of the shipyard as security for an export credit guarantee. Industry Minister Mr Ib Stetter was not yet prepared to comment on the chances of approval.

The trustees are hoping to sell the majority of the shares to institutional investors.

The Copenhagen shipyard has staged a remarkable recovery since the B & W group's bankruptcy in 1978. It has specialised in the construction of energy-economising bulk carriers of about 64,000 dwt.

In 1982 it made a profit of Dkr 90m (\$8.2m). Earnings for 1983 will exceed Dkr 100m on sales of Dkr 1.2bn, managing director Mr Cato Sverdrup said.

Dow Chemical banking units to be regrouped

BY WILLIAM HALL IN NEW YORK

DOW CHEMICAL, the second largest U.S. chemical company, is planning a major reorganisation of its worldwide banking operations in a move to strengthen its position in international financial services.

At the moment, Dow's international banking operations function as subsidiaries of its 76 per cent-owned Swiss offshoot, Dow Banking Corporation. Dow now plans to transfer the ownership of several of its overseas banking operations to a new Delaware holding company. It has not yet been decided whether Dow Chemical's interest in Dow Banking will be transferred to this new financial services company or will continue to be held directly by the chemical company.

Dow Chemical feels that it can better maximise the potential of its assorted financial interests by reorganising their ownership. While

Dow intends to continue expanding its Swiss banking operation, Dow officials believe that there are disadvantages in having all their international financial operations organised under a Swiss company.

The move is expected to affect Dow's important UK operations, which are centred on the merchant bank, Arbutnot Latham. Dow owns 52 per cent of Dow Scandia, a joint venture with Nordic partners, which controls the UK business.

In addition, Dow Banking owns a Singapore merchant bank, a Cayman Islands bank, a Hong Kong licensed deposit-taking operation in partnership with Malaysian investors and a leasing and factoring operation in Malaysia.

Mr Leslie Merszei, president of Dow Banking, yesterday confirmed that Dow's banking operations were undergoing a reorganisation.

Data General earnings surge in first quarter

By Terry Byland in New York

A SUBSTANTIAL increase in sales and profit was reported for the first quarter of fiscal 1984 by Data General, the manufacturer of digital computers, systems and software, which has been extending its range of data processing products and services over the past three years.

Sales have risen by a fifth to \$219.6m for the quarter and net earnings of 58m or 36 cents a share, have increased almost threefold.

Data, which sells 35 per cent of its product overseas, with Europe an important market, says it is benefitting from the recovery in worldwide capital spending. The impetus for the group's increased sales has come from its hardware divisions. Mr Edson D. Castro, company president, commented that, "the improvement reflects both the beginning of an improvement in capital spending and the competitiveness of our products."

For fiscal 1983, Data recorded a fall of 6.4 per cent in net income to \$23.1m after allowing for \$4.6m extraordinary gain in the previous year. Sales edged forward to \$826m.

But results for the final quarter of last year began to benefit from efforts to improve investment and productivity after earnings had fallen sharply in fiscal 1982.

Fourth-quarter profit for Kaiser Aluminum

BY TERRY DODSWORTH IN NEW YORK

KAISER Aluminum, the third largest U.S. aluminium producer, returned to profitability in the final quarter of last year after a series of four quarterly losses in which it ran up a total net deficit of \$240m.

The final quarter surplus was \$48.2m or \$1.07 a share, against a loss a year earlier of \$123.4m, or \$2.96.

The results underline the improving conditions in the U.S. aluminium market since the summer, which have allowed the industry to push through price increases as demand has recovered. Mr Cornell Maier, chairman, said the group

had also established a tighter grip on operating and administrative costs, and be forecast that Kaiser would be profitable in 1984.

Following heavy losses in the first 9 months of last year, Kaiser's year-end deficit amounted to \$70.7m or \$1.65 a share, against \$115m or \$2.68 a share in 1982. These figures include an after-tax benefit from the liquidation of inventory under the Lifo system of accounting of \$77.6m, compared with \$27.4m in 1982, but the company says it does not expect to realise significant Lifo gains in 1984.

Big gain for Daisy Systems

By Louise Kehne in San Francisco

DAISY SYSTEMS, the computer-aided design work station manufacturer, dramatically increased sales and earnings for its first quarter ending December 31. Revenues for the quarter were \$13.1m, up from \$2.2m in the first quarter of fiscal 1983 and an increase of 78 per cent over revenues for the quarter ending September 30.

Income grew to \$2.3m compared with \$44,000 for the same period last year and income of \$1.7m for the previous quarter.

Daisy Systems, founded in 1980, made its public offering of stock last June at an initial offering price of \$15.50. The stock was trading yesterday at \$23.75.

Mr Lucia Lanza, vice-president of marketing, said: "The computer-aided design market is blossoming and we are also gaining market share. Daisy recently introduced a new version of its computer work stations, which are used to automate the design of integrated circuit chips."

The Megalogician is 100 times faster than any other CAD work station available, according to Mr Lanza. Daisy will begin shipment of the Megalogician in April.

VNU expects recovery

BY WALTER ELLIS IN AMSTERDAM

VNU, the Dutch publishing group, expects profits for 1983 to have staged a full recovery.

The company said yesterday that net earnings, which fell steeply to Fl 15m (\$6.03m) in 1982, are likely to have recovered to their 1981 level of Fl 34.2m.

The decline in earnings in 1982 was partly attributable to the allocation of Fl 10m for restructuring. Last year, reorganisation measures began to take effect and there was even expansion of the group's activities in the U.S.

Naarden, the Dutch-based flavours and fragrances company, achieved a net profit of Fl 14m in 1983, an increase of Fl 2.5m on 1982.

Sales rose by 13 per cent, to Fl 560m and are set to increase further this year. Naarden is to invest a total of Fl 30m in its activities in the course of the next few years, more than half of it on improving and extending production facilities in the Netherlands.

The enduring recession in world shipping has forced a sharp drop in the results of Smit Internationale, the Dutch salvage and towage group.

Earnings for the 1982-83 financial year, ending last October 1, fell by 49 per cent to Fl 22.6m, and the board of directors has announced a dividend of Fl 2.75 per nominal Fl 30 share.

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# INTERNATIONAL COMPANIES and FINANCE

## Ford to make Japanese designed car in Mexico

BY WILLIAM CHISLETT IN MEXICO CITY

FORD MOTOR Company is to build a \$500m plant in north Mexico to produce a small car designed by Toyo Kogyo of Japan, for sale mainly in the U.S. as reported in brief in later editions yesterday.

The car, a sporty sub-compact, will be produced in Hermosillo in the state of Sonora. Production is expected to start in 1986 with an annual capacity of 130,000.

Mr Oscar Marx, Ford's managing director in Mexico, said the plant would use the most modern technology and would help the crisis-hit Mexican motor industry to become more efficient.

The plant will be 100 per cent owned by Ford, although Mexico's foreign investment law generally stipulates that foreign companies

form joint ventures in a minority position.

Ford's decision is seen as part of its strategy in the battle for the rapidly expanding small car market in the U.S. as well as its response to Mexican Government requirements.

The Government has decided to apply radical surgery to reduce the motor industry's heavy dependence upon imports and make it more internationally competitive. Mexico's economic recession caused total car and truck sales to drop by 46 per cent in the first nine months of 1983.

Under a recent decree introduced by the Commerce and Industry Ministry, car producers have until

1987 to reduce their production to just one type. Exceptions will be granted only where the company exports over half of its output and is thereby self-sufficient in foreign exchange.

Kenneth Gooding, in London, adds: Mexico's gain seems to be Portugal's loss. Until early last year Ford was considering building the plant to make the small car from Toyo Kogyo parts at the Sines industrial complex and port in Portugal.

Ford decided against the project in spite of the financial attractions and low labour costs in Portugal, but promised to re-open talks if it ever needed more car production capacity in Europe.

## Benetton sales advance

By James Buxton in Rome

BENETTON, the Italian clothing maker which has successfully pioneered new systems for the manufacture and marketing of casual clothes and jeans, saw its sales rise 24 per cent last year to approximately £500m (\$244m), compared with £404m in 1982.

For the first time, sales to foreign markets exceeded those to the Italian domestic market. Foreign sales accounted for 55 per cent of turnover and are expected to reach 60 per cent this year. No profit figure was given.

Benetton, which is based near Treviso, north of Venice, is currently carrying out a major assault on the U.S. market, where it already has about 40 shops.

## Takeovers boost Mellon income

BY WILLIAM HALL IN NEW YORK

MELLON National, the 15th biggest banking group in the U.S. and the first major bank to report fourth quarter 1983 results, increased its net income in the final quarter by 88 per cent to \$53.6m or \$2.01 a share, from \$28.5m or \$1.02 a share.

Mr J David Barnes, Mellon's chief executive attributed the increased earnings to the mergers with the Girard Co, CCB Bancorp and Mortgage and Trust Inc, as well as to business growth at Mellon Bank and other subsidiaries. Continued growth in fee income and gains on the sale of investment securities also contributed to the improvement in earnings.

For the full year, Mellon's net income rose 37 per cent from \$134.4m to \$183.8m. Net income per share rose 9 per cent from \$6.63 to \$7.44 and the return on common share-

holders' equity rose to 14.3 per cent compared with 13.2 per cent in 1982.

Mellon's net interest income rose by 37 per cent to \$814.8m in 1983. Of the \$3.8bn increase in earning assets, \$2.9bn resulted from the assets acquired as a result of the various banking takeovers.

Bank of New York reported record earnings for the fourth quarter and for 1983. Earnings in the quarter rose to \$23.8m or \$1.44 a share, against \$19.5m or \$1.31, and for the year to \$90.6m or \$5.79 a share, against \$73.2m or \$4.98. Per share figures have been restated to reflect a two-for-one stock split in October.

The bank attributed its performance to growth in net interest income supported by increased loan volume and strong gains in trust and other fees.



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STATEMENT OF CONDITION, DECEMBER 31, 1983

ASSETS	
Cash and Due from Banks	\$243,600,794
U.S. Government Securities	159,060,577
State and Municipal Securities	98,026,126
Federal Funds Sold	70,000,000
Loans and Discounts	281,031,444
Customers' Liability on Acceptances	27,855,060
Interest and Other Receivables	26,114,211
Prepaid and Other Assets	13,767,159
Other Assets	5,890,947
	<b>\$885,174,758</b>

LIABILITIES	
Deposits	\$721,841,147
Federal Funds Purchased	66,400,000
Acceptances: Less Amount in Portfolio	28,038,360
Accrued Expenses	8,350,499
Other Liabilities	6,222,768
Capital	\$22,000,000
Surplus	32,305,284
	<b>\$885,174,758</b>

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## Bank Bumiputra inquiry set up

BY WONG SULONG IN KUALA LUMPUR

THE MALAYSIAN Government has set up a Commission of Inquiry to investigate the massive loan scandal involving the country's largest bank, Bank Bumiputra, and Hong Kong property companies.

The investigation, announced by Dr Mahathir Mohamad, the Prime Minister, is seen as an attempt to defuse the growing public outcry over the affair and to remove the issue from the fierce campaigning now going on for the triennial elections of the ruling United Malays National Organisation, in May, in which the top leadership is expected to come under challenge.

The Commission will be headed by Tan Sri Ahmad Noordin, the respected Auditor General, and will include Mr Ramli Ibrahim, senior partner of Peat, Marwick and Mitchell, the chartered accountants and Mr Chooi Mun Sou, a prominent lawyer.

Dr Mahathir said the Commission's report would be tabled

in parliament as a Government White Paper, but no time limit has been set for its submission.

The investigation is being held as a Bank Bumiputra inquiry under the Banking Act and not under the Commissions of Inquiry Act, which means the Commission has no legal power to compel witnesses to testify.

Between 1979 and 1982, the state-owned Bank Bumiputra, through its Hong Kong-based subsidiary, Bumiputra Malaysia Finance, is reported to have lent about US\$850m to Hong Kong property companies.

The bulk of the loans went to the Carrion group, headed by Mr George Tan, and to Eda Investments. Both companies are now under liquidation, following a collapse in property prices.

In the past fortnight, BNF has filed eight suits against Mr Tan for US\$180m—the sum in which he stood as guarantor for the Carrion loans.

## U.S. gate array market widens for Fujitsu

BY LOUISE KEHOE IN SAN FRANCISCO

A MARRIAGE of convenience between two giants of the semiconductor industry was celebrated this week. Fujitsu of Japan, the eighth largest chip maker in the world, with semiconductor sales of \$530m and Texas Instruments of Dallas, Texas, the second largest semiconductor producer in the world with chip sales last year of \$1.5bn, agreed to swap chip technology for marketing strength in the fast-growing market for "gate array" chips.

Gate arrays are integrated circuits specifically designed to fit a customer's particular requirements and made by laying down a tailored interconnect pattern onto a matrix of micro-miniature logic circuits. They are quickly becoming a major sector of the semiconductor market.

Over 100 companies, most of them started in 1979-1980, are competing in the gate array business, though many of them are not expected to remain in it much longer.

Texas Instruments has won the right to manufacture, under licence, Fujitsu's attractive range of gate array chips. In doing so, it has helped establish Fujitsu's designs as industry standards, and has provided Fujitsu with an important access to the U.S. market.

Traditional U.S.-Japanese rivalries seem to have been no

impediment to this new union. When market opportunities arise, relationships between chip makers in the two countries

Traditional rivalries between the U.S. and Japan have been no impediment to the union between Texas Instruments and Fujitsu, two of the largest semiconductor makers in the world, which have joined forces to gain an important share of the fast growing market for gate array chips

appear to improve quickly. The TI-Fujitsu pact follows others such as National Semiconductor's technology exchange agreement with ORL, and Hitachi's exchange agreement with Hewlett-Packard.

The agreement is expected to increase Fujitsu's sales of gate arrays in the U.S. and Europe, since Texas Instruments' customers may choose to order from both suppliers.

More important for Fujitsu, however, is to ally itself with a strong and well-regarded U.S. alternative supplier for its gate array customers. Fujitsu, as the leading gate array supplier in Japan and a major supplier in the U.S., has been looking for a partner with which to stand up to the increasing market pressures created by an alliance between LSI Logic, RCA, SGS and Toshiba—all of which offer gate arrays with

matching design specifications. For Texas Instruments, the arrangement offers a welcome entry into the high performance

metal oxide semiconductor) low power chips.

"The agreement with Fujitsu broadens our product line and gives us access to the leading CMOS family of gate arrays," said Mr Walden C. Rhines, senior vice-president of Texas Instruments. "We have been limited in our CMOS gate array capability."

World wide sales of gate arrays will grow from around \$200m last year to over \$900m in 1986, according to Dataquest, a market research company. "There are currently 68 suppliers in the gate array market, 1984 will be a shakeout year," according to Mr Andy Prophet of Dataquest.

**Pan-Holding Societe Anonyme**  
Luxembourg

Based on a provisional unaudited statement of the accounts as of December 31, 1983, the Company's unconsolidated net assets amounted to US\$164,128,435.76, i.e. US\$234.47 for each of the 700,000 shares of US\$50 making up the Company's capital.

The consolidated net asset value per share amounted as of December 31, 1983, to US\$238.14. The Annual Report will be available at the Registered Office of the Company, as of March 31, 1984.

## The Hoover Company

has acquired the outstanding minority interests in its subsidiary

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The following acted as advisers to The Hoover Company:

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U.S. \$30,000,000



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The Mitsubishi Bank, Limited**

Managed by:

**The Fuji Bank, Limited  
Manufacturers Hanover Trust Company, Tokyo Branch**

Provided by:

**The Sumitomo Bank, Limited  
Citibank N.A.  
The Hokkaido Takushoku Bank, Limited  
The Meiji Mutual Life Insurance Company  
The Mitsubishi Bank, Limited  
The Fuji Bank, Limited  
Manufacturers Hanover Trust Company, Tokyo Branch  
Westdeutsche Landesbank Girozentrale, Tokyo Branch**

Agent Bank:

**The Sumitomo Bank, Limited**

Weekly net asset value



**Tokyo Pacific Holdings (Seaboard) N.V.**

on 4th January, 1984, U.S. \$88.37

Listed on the Amsterdam Stock Exchange

Information: Pierson, Helderling & Pierson N.V.,  
Herengracht 214, 1016 BS Amsterdam.

INTL. COMPANIES & FINANCE

APPOINTMENTS

Bernard Simon on the aftermath of an SA corporate upheaval

Hotel gives Southern Sun a chance to prove it has weathered the storm

WHEN THE Sandton Sun welcomes its first guests later this month, the management will be trying to prove more than Johannesburg's newest five-star hotel. The opening also gives Southern Sun, South Africa's biggest hotel group, a chance to prove that it has weathered one of the most spectacular corporate upheavals in the annals of South African business.

Mr Peter Bacon, Southern Sun's chief executive readily concedes that the departure six months ago of his flamboyant boss, Mr Sol Kerzner, was "quite a distressing time."

Mr Kerzner, a businessman more publicised here than even Mr Harry Oppenheimer, the mining magnate, who is chairman of de Beers and retired chairman of Anglo American Corporation, walked off with the jewels in Southern Sun's crown when he set up a new hotel group with a monopoly on Southern Africa's lucrative casino resorts. He took with him Southern Sun's financial director, public relations manager, and casino expert, as well as properties which contributed more than a third of the group's trading profit of R56m (\$44.5m) in the year to last March.

In return, Southern Sun has received R30.2m in cash and a 30 per cent stake (which will

drop to 25 per cent on April 1) in Mr Kerzner's company, Sun International. Pointing to the volatile earnings of casino operations, Mr Bacon argues: "We've minimised our risk, and at the same time we're in a position to benefit from Sun International's expertise." Sun International continues to provide project management services to Southern Sun, while the latter will handle reservations for Mr Kerzner's group until April.

Mr Bacon has worked for Southern Sun for more than a decade (he was previously group personnel manager at Trusthouse Forte in the UK). But his management style is a far cry from Mr Kerzner's restlessness and penchant for spontaneous decision-making and post-midnight calls to colleagues and suppliers.

Mr Bacon is unlikely to repeat Mr Kerzner's simple instruction to the interior designer of Sun City, the gaudy casino and entertainment resort in the Bophuthatswana homeland: "Just blow their minds."

According to Mr Bacon, Southern Sun will in future restrict its expansion to major hotels in urban areas. "Our future lies in big first-class operations," he says.

Many believe that the change to a quieter, more cautious approach is timely. Southern Sun has an ambitious invest-

ment programme on its hands, running to over R150m, when the threat of a long-term oversupply of hotel beds in South Africa is increasing.

Three months ago, the group opened a 370-room five-star hotel in Cape Town. The Sandton Sun will add 340 rooms in Johannesburg's northern suburbs, and work started recently on an 800-room development in central Johannesburg, which is due for completion in 1987 at a cost of R110m. The group also has a R20m refurbishment programme in hand for its 25 existing hotels, and is discussing construction of a R70-80m convention and hotel complex on Durban's beachfront. Hotel construction in South Africa is encouraged by tax incentives, which allow the developer of a five-star establishment to write down the investment in 10 years. But high domestic inflation has pushed hotel building costs in South Africa as high as those in the U.S.

Even Southern Sun's competitors concede that the Sandton Sun may reach its target occupancy rate of 75 per cent this year. It is located in a suburban shopping and office area, far enough from the central city not to compete with Johannesburg's other five-star hotels. Nonetheless, Mr Bacon forecasts that the group's earnings this year will be 12-13 per cent

below 1983. Occupancy rates of Johannesburg's centre-city hotels tumbled by around 15 per cent last year, and are not expected to improve in 1984. Competition is especially stiff in Natal, the country's most popular holiday destination where Southern Sun owns eight hotels.

In a measure to shield itself from the vagaries of the hotel business, Southern Sun has diversified into time-sharing, already converting two hotels into time-share developments.

At a memorable auction of timeshare units last month at the group's Beacon Island Hotel in Pieterberg Bay on the southern Cape coast, one bidder paid R85,000 for the right to a fortnight's stay once a year in a suite. Southern Sun claims to be among the world's three largest time-share companies, with revenues of R60-70m in two years.

During Mr Kerzner's time, Southern Sun investigated several expansion opportunities in other countries, notably the U.S., Israel and Australia. It came close to burning its fingers in an unsuccessful casino venture in Atlantic City, New Jersey. Mr Bacon says that Southern Sun will continue to look for investments outside South Africa, but not at the risk of sacrificing profitability for size. "We could get bigger very quickly," he says, "if we wanted to by doing the wrong deals."

Executive moves at Allied Breweries

Allied-Lyons has made the following board changes in the beer division controlled by its subsidiary ALLIED BREWERIES: Mr J. R. N. Thompson, a director of Allied-Lyons and currently chairman and managing director of Ansell's, is to become corporate director of Allied Breweries with responsibility for relationships with the brewing industry, the Brewers' Society and the EEC and for the existing central property function. He will continue as president of Skol International, chairman of Allied Products and chairman of Oldham Signos. Mr P. E. Barnton is to join the board of Allied Breweries in March and will become managing director of Ansell's. Mr Danton is currently marketing staff member of the detergents co-ordination of Unilever. Mr D. F. Siracusa, a director of Allied-Lyons and managing director of Allied Breweries will, in addition to his existing responsibilities, succeed Mr Thompson as chairman of Ansell's on a convenient date during 1984.

Dr Michael Ray, managing director of TARMAC GROUP company Permanent, has been appointed managing director of the Tarmac Felt Group of companies Permanent British Hydroflex and Irish Roofing Felts.

Mr Bryan A. Bates has resigned as chairman and managing director of British Market Research Bureau and as deputy chairman of MRBL. From April 2 he will be taking up a new appointment as a shareholder in, and executive director of, Market and Opinion Research International (MORI). Other appointments at MORI include Mr Roger J. Sinibs to be deputy managing director; Mr Peter Hinton and Mr Stewart Lewis to be associate directors. Mr Peter Henthison is to become company secretary. The company is now entirely employee-owned.

A. E. Symes, he was appointed managing director, a post he has held for the past three and a half years.

Mr G. R. A. Metcalfe has been appointed chief executive, and Mr R. D. Oates has been appointed financial director of UMECO HOLDINGS.

Mr F. J. R. Boddy has been appointed group managing director of TILCON LIMITED, a subsidiary of BTR. He succeeds Mr Gordon Lee, who has retired. Mr Boddy was previously on the board of ECC Quarries prior to joining Ticon in 1983 as deputy managing director.

Mr Henry Galazka has joined the board of CAMPBELL'S UK as a non-executive director.

Mr Norman Snape has been appointed regional executive director of NATIONAL WESTMINSTER BANK'S north regional office in succession of Mr J. M. Burgess, who has retired. Mr Snape's former position of deputy regional director, north regional office, has been taken by Mr Bill Burton, area director, Birmingham office.

Mr Y. M. Raja Peetra bin Raja Kamarudin has been appointed a director of WILLIAM JACKS. He is also a director of Johan Holdings Berhad, Malaysia and Jacks International, Singapore.

BICC makes board changes

BICC has made board changes from April 1 on the retirement of Mr H. L. Jeffries and Mr J. J. Moore. Mr W. A. Barnett, at present regional director, London South West, has assumed responsibility for the City and London East region.

Mr Boh Seller, former managing director of Cementation Construction, has been appointed managing director of a newly formed division which groups together civil engineering and specialist engineering companies in the TRAFALGAR HOUSE GROUP. The new division will include Cementation Construction (Mitcham); Cementation Piling and Foundations (Rickmansworth); Cementation Mining (Doncaster); RDL Contracting (Doncaster); Cementation Ground Engineering (Rickmansworth); Trocoll Quarries (Ainwick); Cementation Muffelite (Walton-on-Thames); Cementation Specialist Stores and Workshops (Doncaster); and Cementation Research (Rickmansworth). Mr Dick Gillespie has been appointed managing director of Cementation Construction. He has been deputy managing director since 1975.

Mr R. E. M. Craher, at present regional director of City and London East region, MIDLAND BANK, has been appointed assistant general manager, group risk management. Mr W. A. Barnett, at present regional director, London South West, has assumed responsibility for the City and London East region.

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Mr Trevor Crow who joined the JOHN WILLMOTT GROUP 15 years ago as a contract surveyor, has been appointed deputy group chief executive responsible for the building contracting activity for the group's four divisions. He remains managing director of John Willmott Anjlia Building, Cambridge.

Mr Nigel Banister has become managing director of NMW COMPUTERS. Mr David Fehrl, formerly marketing director, has succeeded Mr Banister as marketing director.

Mr E. Goy Abel has joined the board of the LILLESHELL CO. as a non-executive director.

ABBOTT'S PACKAGING, a member of the Macfarlane Group (Glasgow), is to separate its case manufacturing operations from its merchandising activities and has appointed Mr Malcolm Pilcher as managing director of the new company, known as

Following the formation by Esquepe Arabe et Internationale d'Investissement (B.A.I.I.) of B.A.I.I. PROJECT AND TRADE FINANCE the following appointments have been made: Mr Gerald L. Tedder, chairman, Mr David J. Perry, managing director, Mr Tony J. Brandner, director, Mr Mark J. S. Redmayne, director, Mr Simon Udale, director and Mr Norbert Danville (France), non-executive director. All the above will retain their existing positions within the B.A.I.I. Group. Mr Peter Capel is appointed to the board as a non-executive director.

Dr J. C. Hamel, managing director of Glaxo Pharmaceuticals has been appointed to the board of GLAXO HOLDINGS.

BRITISH CALEDONIAN has named Mr Peter Smith as planning director. He was the airline's chief planner.

LASMO has appointed Mr Richard Barry as general manager, production and operations, for the Group. Mr Barry is vice president of Saga Petroleum with responsibility for its West Africa operation.

BURRUP MATHIESON AND CO. has appointed Mr Tony Norton, Mr Christian Poltera and Mr John Merveer as associate directors. Mr John Waterlow has rejoined the company as an associate director.



Mr Trevor Crow, deputy group chief executive, John Willmott Group

Bank Negara warns Malaysian commercial banks against extension in property loans

BY WONG SULONG IN KUALA LUMPUR

BANK NEGARA, Malaysia's central bank, has sounded a note of caution over the extent of commercial bank lending for property development. This is, it says, too heavy when the property market is dull and signs of an office space glut are increasing.

With the Malaysian economy fast recovering in line with global recovery and strong commodity prices, Bank Negara wants commercial banks to redirect their lending to capital

investments which could increase productivity.

Tan Sri Aziz Taha, Governor of Bank Negara, pointed out at a business seminar this week that 31 per cent of bank loans outstanding at March 1983 were used to finance residential, commercial and office development, with some banks having as much as 40 per cent of their loans in this sector.

"The time has come for banks individually to review their loan commitments to

ensure a fair allocation of credit and of acceptable risks," he said.

Tan Sri Aziz said a Bank Negara survey showed that 48 property projects in Kuala Lumpur alone would create more than 16m sq ft of office space between 1983 and 1987. Rentals were already falling, and values of buildings might decline.

The bank's survey is in line with another published by

Rahim and Company, the chartered surveyors, which predicted a glut of over 3m sq ft of office space in Kuala Lumpur by 1986.

Meanwhile, Dato Sharir Samad, Federal Territory Minister, confirmed that his Ministry was planning to impose limits on high-rise building in Kuala Lumpur because of overdevelopment in recent years, which created strain on social facilities.

**CREDITANSTALT-BANKVEREIN**

US\$125,000,000  
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December 1983

This announcement appears as a matter of record only

December 21, 1983

**\$310,000,000**

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and

**Spiegel Inc.**

Commercial paper supported by

**Dresdner Bank AG, New York Branch**

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**DG BANK Deutsche Genossenschaftsbank**  
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**Dresdner Bank AG, New York Branch**  
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**Merrill Lynch Capital Markets**  
Dealer for commercial paper

**INTERNATIONAL CAPITAL MARKETS**

It is proposed to publish a survey on the International Capital Markets on Monday, 19th March, 1984.

Subjects to be covered will include the following:

Introduction. Persistent high interest rates and the payments problems of developing countries again made a difficult backdrop for capital markets in 1983. The total volume of new bond issues failed to reach 1982's record, while business in the eurocredit market slumped dramatically. Nonetheless both markets are seeing some radical innovations as participants struggle to adapt to the changing environment.

- The world economy
- The outlook for interest rates and exchange rates
- The developing country debt crisis
- Funding the banks
- Balance of payments trends and capital flows
- The bond markets
- International bank lending

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**UK COMPANY NEWS**

**Associated Dairies jumps to £49m at interim stage**

Associated Dairies Group is holding its interim dividend by a third on the back of a 47.2 per cent pre-tax profit improvement in the 26 weeks to November 12 1983.

A strong performance by Asda stores featured the opening period which saw group profits jump from £33.1m to £48.7m. However, Mr A. N. Stockdale, chairman, says it would be imprudent to assume that such a high rate of growth will be maintained for the remainder of the year.

An analysis of first half turnover, up 15.3 per cent from £780.1m to £897.5m after deducting inter-company sales of £40.45m (£35.1m), and operating profits, 50.5 per cent higher at £43.2m (£28.7m) after group overheads of £2.1m (£1.6m), shows by division: Asda stores £77.07m (£66.81m) and £36.47m (£24.53m); Associated Fresh Foods £36.02m (£78.92m) and £6.71m (£3.93m); Allied Carpet stores £35.06m (£32.87m) and £1.41m (£250,000); Wades departmental stores £27.04m (£24.11m) and £380,000 (£301,000); Ukay furnishing centres all (£2.71m) and all (£22,000 loss) and miscellaneous operations £1.63m (£1.4m) and £87,000 loss (£81,000 profit).

Operating profits as a percentage of turnover were up from 3.73 to 4.92, while pre-tax profits represented 5.58 (4.36) per cent of sales.

The more rapid growth of profits than sales can to some extent be attributed to excep-

**DIVIDENDS ANNOUNCED**

Company	Current payment	Date of payment	Corre. dividend	Total dividend	Total last year
Associated Dairies	1.25	Mar 2	0.94*	2.19	1.25
Baker's Stores	1.35	—	—	1.35	1.66
Bespak	1.5	Jan. 26	—	1.5	2
Ellis & Everard	1.5	Mar. 12	2.27*	3.77	5.91*
Espley-Tysoe	1.5	May 11	3.2	4.7	6.23
Investors Capital	1.95	Mar. 15	1.85	3.8	3.35
Magnet & Southern	2.7	Mar. 30	1.7	4.4	3.9
Pyke Holdings	2.7	Feb. 17	2.5	5.2	2.5
United Packaging	1.4	Mar. 30	—	1.4	1.55

\* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ USM stock. § Unquoted companies. ¶ For 15 months.

There were first half minority profits of £5,000 (£2,000) which left the available balance at £23.39m (£12.6m after an extraordinary debit of £3.29m).

Commenting on divisional performance, Mr Stockdale says Asda's profits growth came from increased sales volume in comparable stores, improved margins particularly from a better sales mix, and more favourable factors relating to new store openings, notably the profit contribution coming from the higher number of stores opened in previous years and lower costs stemming from fewer openings.

With a market capitalisation of U.S.\$1.21bn, calculated on an average share price last June, Associated Dairies was Europe's 69th largest company, improving from a position of 79 a year earlier.

See Lex

**Magnet & Southern advances by 43%**

ON A £13.63m rise in turnover to £84.03m Magnet & Southern pushed its pre-tax profits up to £17.23m for the six months ended September 30 1983, an increase of 43.14 per cent over the £12.07m returned for the same period last year.

Sales for the second half have continued at a very good level and Mr S. Oxford, the chairman, says figures for that period will at least match those now reported, "provided the weather does not let the group down at this late stage."

The interim dividend is being stepped up from 1.7p to 2.5p net per 25p share on the capital enlarged by the rights issue of last March. A final of 2.2p was paid for the 1982-83 year when profits rose by 28.7 per cent to £24.59m (£18.11m) on turnover of £111.69m (£136.36m).

The group, which manufactures prepared joinery doors and ancillary products, is continuing with the policies outlined at the annual meeting and has seen a considerable increase in its sales of kitchen units and other added value products.

Private housing starts have held up well which Mr Oxford says has favoured the timber merchandising side of the group. He adds that with prices of imported raw materials having increased the group's stock values, and operating margins have been protected.

At the AGM in September shareholders were told that Magnet had opened a further 13 new openings in the year to September 30, against £23.7m previously. Losses in 1980-81 reached £49.8m before tax.

Turnover last year rose 17 per cent to £846.5m from £720.9m. Borrowings were reduced last year to £56m from £177.9m from a peak of £280m in 1981. Net debt was brought down to the equivalent of 42.5 per cent of shareholders' funds. The improvement was brought about mainly by the success of two rights issues worth £118m.

Sir Christopher R. Laidlaw, the outgoing chairman who will be succeeded in April by Sir Michael Edwardes, the former chairman of BL, said the board had no firm figures yet for first quarter trading, but that early indications showed a healthy improvement in orders over the same period last year.

The benefits of this improvement were unlikely to flow into revenue and profit until the second half of 1983-84, he said.

ICL, which was bailed out by a Government loan guarantee of £200m in April 1981, lifted its pre-tax profit to £5.6m in the year to September 30, against £2.7m previously. Losses in 1980-81 reached £49.8m before tax.

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Sir Christopher Laidlaw (left), present chairman of ICL, at the company's AGM with Sir Michael Edwardes who will take over the post on April 2.

**ICL expects further growth in current year**

ICL, Britain's leading computer manufacturer, expects further growth in profits this year, though this will be "modest" in comparison to last year's 92 per cent earnings increase.

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**Ellis & Everard calls for £4.4m as profits jump 26% to £1.16m**

Ellis and Everard, chemicals distribution group, is raising £4.4m net by way of a two-for-seven rights issue at 169p per share.

Imperial Chemical Industries, which holds a 25.81 per cent stake in the group, will take up the rights issue in full—750,044 shares.

At the same time Ellis has released its results for the six months ended October 31 1983, showing better turnover and pre-tax profits at record levels.

Both rose by over 26 per cent to £26.99m (£21.31m) and £1.16m (£893,000) respectively. The interim dividend is effectively increased from 2.27p to 2.5p net per 25p share and a final of not less than 1p is expected to be paid which compares with an adjusted 3.63p.

In his interim report Mr Simon Everard, chairman, says that all sectors of the group perform well, particularly in North America.

He tells shareholders that since October 31 turnover has continued to increase in both the UK and the U.S., although at a slightly slower rate. The results for the full 12 months are expected to be "satisfactory" — pre-tax profit for 1982-83 totalled £1.88m.

The rights issue will enable Ellis and Everard to reduce bank borrowings and put the company in a strong position to pursue its programme of expansion, both in the UK and the U.S.

Mr Everard points out that the group's continuing growth has given rise to an increased requirement for working capital which has been met by a considerable extent from borrowings.

Net borrowings have risen from £187m at April 30 1983, to £218m at October 31 1983. The increase in the percentage of net

borrowings to shareholders' funds at April 30 last was 25.9 per cent to 41.5 per cent.

The rights issue, other than the new shares being subscribed for by ICI, has been underwritten by S. G. Warburg and Co. Brokers to the issue are Sheppards and Chase and Capet-Cure Myers.

Pre-tax profits for the opening half were struck after deducting £1.75m (£1.53m) distribution costs, £3.18m (£2.77m) administration expenses, associate losses of £28,000 (£7,000) and net interest charges of £154,000 (£138,000).

Tax accounted for £205,000 (£216,000) and minorities £24,000 (£19,000).

Attributable profits emerged at £84,000 (£84,000) for earnings of 6.5p (5p adjusted) per share.

• comment •

The rights issue from Ellis & Everard has its share of opportunism, but it also makes sense. The upturn in the company's fortunes dates from the disposal of the building supplies business in 1978, and the £3.6m from that sale has since been spent on the chemicals business. As to further expansion, the company is in the U.S. so far has been very encouraging. Last year, the AIGC acquisition made a first-time 11-month contribution, net of costs, of £200,000. This year, the "green fields" operation in Chattanooga was notching up monthly sales of £50,000 after four months, and the £300,000 break-even point is obviously not far off. As to further U.S. acquisitions, the group will be the more nimble for being able to offer cash up to £2 million for a quick deal. The shares rose 3p yesterday to 195p.

**UK rise bolsters Utd. Packaging**

INCREASED profits from UK operations virtually offset lower returns from Zimbabwe and contained a shortfall in interim taxable profits at United Packaging to just under 2 per cent.

For the six months to October 31 1983 group profits were £460,831, against £489,983, with £190,378 (£139,529) attributable to the UK and £270,505 (£210,456) to Zimbabwe. After allowing for exchange rate fluctuations, turnover for the period was nearly 14 per cent higher at £3.78m, compared with £3.26m.

Major growth was achieved in the UK packaging film business and the directors are optimistic that this trend will continue in the second half. They add that in spite of difficult trading conditions in Zimbabwe profit margins were and should continue to be maintained.

The company, which is traded on the USM, is paying an interim dividend of 1.4p net and anticipates that last year's single final payment of 1.55p will at least be maintained, when pre-tax profits of £1m were earned.

Net profits for the opening period, emerged at £228,204 (£231,072) after tax of £232,677 (£238,913). Earnings per share amounted to 6.15p (6.11p). A reduction in minorities to £22,817 (£36,763) left a slightly higher attributable balance of £195,387 (£194,309). The interim dividend will absorb £44,500.

• comment •

United Packaging is not as dull as the latest profits line might imply. A steady advance at home has been dashed by the weakness of the Zimbabwe dollar which has chopped down an advance by UP's major overseas subsidiary in local currency terms to a \$40,000 setback. Still UP can only remit its 75 per cent share of net profits—worth under \$50,000 in this half—so the bold figures presented have little relevance to dividend paying power, or, indeed, the underlying progress of the company.

In the UK its plastic stretch wrapping equipment and supplies are selling well and light bulbs in the Cleckheaton factory are close to glowing a 24-hour day seven days a week. In Zimbabwe UP is embarking on physical expansion of its yarn spinning capacity far and above local needs. Exports will be the name of the game, even to the UK where Zimbabwe production will be competitively priced against domestic output. Overall full-year profits should be over £1m. But more important for the share price at 92p is when the chairman will release his stranglehold on the equity. And he is more than keen to shake out some of his 78 per cent stake. When the full year is out, Laurie Milbank will be looking at ways to put more shares into private, rather than institutional, hands.

General demand for group products remained "good". Tax for the first half accounted for £8.1m, compared with £4.76m, to leave net profits £31.5m ahead at £11.12m. Interim dividend payments absorb £3.58m (£2.7m).

See Lex

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See Lex

**Forte debentures**

Subject to obtaining necessary sanction from stockholders Forte Holdings is proposing to repay the outstanding 6.1 per cent debenture stock 1983-88 at £97.50 per £100 nominal, the outstanding 7.7 per cent debenture stock 1985-90 at £95 per £100 nominal, and the outstanding 4.8 per cent debenture stock 1988-89 at £95 per £100 nominal.

**Bespak soars 53% midway and trend 'still upwards'**

INTERIM PROFITS of Bespak, manufacturer of aerosol valves, expanded by 53 per cent from £54,000 to £82,600 in the year to September 30, against £54,000 "still upwards", the directors state.

However, they point out that the company is bearing extra costs in relation to the new USM subsidiary and cannot be expected to match the 60 per cent increase achieved in the second half of last year, which resulted in a year on year rise to £1.5m in full year profits.

First half turnover rose to £4.94m (£3.77m) and the directors say that while major products are performing strongly, there are areas where increasing pressure on volume in the perfume valve sector. The necessary approvals pre-

cedent to the full scale marketing of fire extinguishers incorporating the company's valves, in the U.S. are taking longer than anticipated, but the directors are confident about the outcome.

The group, which joined the USM in November 1982 and moved to a full listing last August, is paying its first interim dividend. A 1.5p payment follows last year's single final dividend of 2p.

First half pre-tax profits were struck after interest of £109,000 (£141,000) and included interest receivable of £58,000 (£33,000). Tax for the period absorbed £157,000 (£111), after which earnings per share are given as 5.3p (£4.4p). There were extraordinary debits, being introductory expenses, this time of £29,000.

**Rayford exceeds forecast**

FROM TURNOVER of £20.88m in the year ended September 30, 1983, discount electrical stores group Rayford Supreme Holdings has turned in a profit of £1.81m. The dividend is the promised 2.1p net.

The profit compares with not less than £1.75m forecast last July when the company set the USM, placing some 20 per cent of its shares at 205p each. The company currently operates 27 discount showrooms mainly in the south-east, and deals in white and brown electrical goods. It trades under the names of Rayford Electric and Supreme Discount Stores.

After tax of £10,000 (credit £40,000), the net profit for the year was £1.3m, against £331,000 previously. Extraordinary charges of £250,000 (£226,000) and cost of sales are shown at £(5.9p). Cost of the dividend is £123,000.

**PYKE HOLDINGS PLC**

**'A year of substantial growth'**

REPORTS P. GARNER, CHAIRMAN, IN HIS REPORT ON THE YEAR TO 30 SEPT 1983

- Substantial increase in pre-tax profits to £630,449 compared with £305,947 for previous 15 month period.
- Successful Rights Issue is assisting with substantial investment programme enabling group to improve and increase production facilities.
- Acquisition of Peter Fairfax, part of our planned expansion programme will increase geographical spread and the group is now the leading UK supplier of meat to the catering industry.
- Current year has started well with trading for 3 months to 30 December at a higher level than last year.

Comparative results	Year ended	15 months ended
Turnover	18,450	18,151
Profit before tax	630	306
Profit after tax	520	309
Dividend per share	3.5p	2.5p
Earnings per share	19.82p	12.87p

Copies of the Report and Accounts will be available after 23 January 1984 from The Secretary, Pyke Holdings PLC, 188 York Way, London N7 9AT.

**Catering Butchers**

**BASE LENDING RATES**

A.B.N. Bank	9%	Hambros Bank	9%
Allied Irish Bank	9%	Heritable & Gen. Trust	9%
Amro Bank	9%	Hill Samuel	9%
Henry Ansbacher	9%	C. Hoare & Co.	9%
Arthur Cantelmo	9%	Hongkong & Shanghai	9%
Arco Trust Ltd.	9%	Kingsnorth Trust Ltd.	9%
Associates Cap. Corp.	9%	Knowles & Co. Ltd.	9%
Banco de Bilbao	9%	Lloyds Bank	9%
Bank Zapoalim BM	9%	Mallinhal Limited	9%
BCCI	9%	Edward Mann & Co.	10%
Bank of Ireland	9%	Megraw and Sons Ltd.	9%
Bank Leumi (UK) plc	9%	Midland Bank	9%
Bank of Cyprus	9%	Morgan Grenfell	9%
Bank of Scotland	9%	National Bk. of Kuwait	9%
Banque Belge Ltd.	9%	National Girobank	9%
Banque du Rhone	10%	National Westminster	9%
Barclays Bank	9%	Norwich Gen. Tr.	9%
Bank of Montreal	9%	R. Raphael & Sons	9%
Bremer Holdings	10%	P. S. Refson & Co.	9%
Brit. Bank of Mid. East	9%	Rozburgh Guarant.	9%
Brown Shipley	9%	Royal Trust Co. Canada	9%
CI Bank Nederland	9%	J. Hury Schroder Wagg	9%
Canada Perm. Trust	10%	Standard Chartered	11%
Castle Court Tr. Ltd.	9%	Yokohama Spec. Tr.	9%
Cayzer Ltd.	9%	TCB	9%
Cedar Holdings	9%	Trustee Savings Bank	9%
Charterhouse Japhet	9%	United Bank of Kuwait	9%
Choulatons	10%	United Mizrahi Bank	9%
Cibank Savings	10%	Yokohama Spec. Tr.	9%
Citiesdals Bank	9%	Westpac Banking Corp.	9%
C. E. Coates	9%	Whiteaway Laidlaw	9%
Comm. Bk. of N. East	9%	Williams & Glyn's	9%
Consolidated Credits	9%	Wintrest Secs. Ltd.	9%
Co-operative Bank	9%	Yorkshire Bank	9%
Cyprus Popular Bk.	9%	Member of the Accessing House Committee	9%
Dunbar & Co. Ltd.	9%	7-day deposits 5.5%, 1-month 5%, 3-month 6%, 6-month 6.5%, 12-month 7%	9%
Dunbar Lewis	9%	7-day deposits on sums of under £10,000 5%, £10,000 and over 5.5%	9%
E. T. Trust	9%	7-day deposits on sums of over £10,000 6%, £10,000 and over 5.5%	9%
Exeter Trust Ltd.	10%	Call deposits £1,000 and over 5.7%	9%
First Nat. Fin. Corp.	11%	7-day deposits over £1,000 5.5%	9%
First Nat. Secs. Ltd.	10%	Overnight deposits 5.5%	9%
Robert Fraser	10%	Mortgage base rate	9%
Grindlays Bank	9%		
Guinness Mahon	9%		

At the Annual General Meeting of ICL, held in London on 11th January 1984, the Chairman, Sir Christopher Laidlaw, said "we expect our results for 1984 to show satisfactory progress on 1983, and the Group is now..."

**...poised for an exciting future"**

Highlights of the 1983 results are:

- ICL Pre-tax profit up 92% to £45.6 million.
- ICL Turnover up 17% to £846 million.
- ICL Earnings per share doubled.
- ICL Borrowings halved to £86 million.
- ICL Shareholders' funds doubled to £232 million.

**ICL Infopoint**  
ICL House, Putney, London SW15 1SW

Please send me a copy of the 1983 Report & Accounts

Name \_\_\_\_\_

Address \_\_\_\_\_

For a copy of the Report and Accounts please use the coupon or dial 100 in normal business hours and ask for Freephone ICL.



**LADBROKE INDEX**  
788-791 (-6)  
Based on FT Index  
Tel: 01-453 5261

UK ECONOMIC INDICATORS

Table with columns for indicators like Manufacturing output, Retail sales volume, Unemployment, and Inflation. Rows show quarterly and annual data for 1983 and 1984.

Table titled 'OUTPUT' showing market sector, consumer goods, investment goods, and intermediate goods. Includes quarterly and annual data.

Table titled 'EXTERNAL TRADE' showing indices of export and import volume, current balance, and terms of trade. Includes quarterly and annual data.

Table titled 'FINANCIAL' showing money supply, bank advances, and domestic credit expansion. Includes quarterly and annual data.

Table titled 'INFLATION' showing indices of earnings, basic materials, wholesale prices, and retail prices. Includes quarterly and annual data.

BIDS AND DEALS

United Biscuits expands frozen food operations

BY CHARLES BATCHELOR. United Biscuits (UB), the McVitie's and Crawford's food group, has expanded its frozen food operations...

LMI has 24% of Benford

London Midlands Industrials (LMI), the engineering, industrial services and consumer goods holding company, has reached agreement with Electra Investments Trust and Globe Investment Trust...

S. Pearson £1.7m disposal

Westminster Press, a subsidiary of S. Pearson & Son, has agreed to sell its stake in Benford Concrete Machinery, the building contractors' plant manufacturer...

Raybeck £1.1m disposal and £0.75m purchase

Raybeck, manufacturer and retailer of ladies' and men's wear, is selling its Davies & Field, manufacturer of ladies' fashion garments...

Ferranti purchase

Ferranti has acquired Astron Developments, of Hounslow. Astron Developments employs about 25 people in the manufacture of mirrors and diffraction gratings...

Share stakes

Henry J. Garratt and Co has purchased 221,000 ordinary Aero shares (5.17 per cent) on behalf of investment clients.

Manchester Ship Canal at Ellerslie Port

Manchester Ship Canal at Ellerslie Port, the joint receivers of Melton Securities Group, is paying £247,650 for freehold premises, covering 19 acres, warehouses, plant and equipment...

James Fisher and Sons, the shipowning, shipping and insurance broking organisation, has completed the acquisition of Maistry Wharf along the

MINING NEWS

Ok Tedi landslide may cost \$300m and a 16-month delay

BY KENNETH MARSTON, MINING EDITOR. FOLLOWING yesterday's news of a big landslide of mud at Ok Tedi, the set-back is not thought likely to force a further postponement of the start of gold production...

Marinduque losses mount

LOSSES of the financially troubled Marinduque Mining and Industrial continue to mount, largely as a result of high interest payments on the company's large debts.

Reed Stenhouse controls 50.2% of Stenhouse

Reed Stenhouse, the Canadian insurance broker and associate company of British broker Stenhouse Holdings, is to declare its 53.8m offer for Stenhouse unconditional in the next few days.

BOARD MEETINGS

Table listing board meetings for various companies including Hillier, Independent Investments, Stewart Plastics, etc.

NOTICE OF REDEMPTION to the holders of bonds payable in American Currency of the issue designated 9% Bonds due February 15, 1985

The Norwegian State and Municipal Power Consortium, Sira-Kvina Kraftelskap

Public Notice is hereby given that The Norwegian State and Municipal Power Consortium, Sira-Kvina Kraftelskap intends to and will redeem its SINKING FUND PURPOSSES on February 15, 1984...

Public Works Loan Board rates

Table showing public works loan board rates for various terms and maturities, effective January 11.

Southwest Airlines EuroFinance N.V.

Notice of Adjustment of Conversion Price. Due to a 5-for-4 stock split declared by the Board of Directors of Southwest Airlines Co. ("the Company") on December 20, 1983...

Boom year for new life business

UK LFE companies, without exception, are reporting that 1983 was a boom year for new life business. The latest batch of figures emphasises that life insurance is a growth industry in the UK.

MANCHESTER SHIP CANAL AT ELLERSLIE PORT

Manchester Ship Canal at Ellerslie Port, the joint receivers of Melton Securities Group, is paying £247,650 for freehold premises, covering 19 acres, warehouses, plant and equipment...

James Fisher and Sons, the shipowning, shipping and insurance broking organisation, has completed the acquisition of Maistry Wharf along the

Matthew Brown PLC

Lion Brewery Blackburn. Extract from the Report and Accounts to 1st October, 1983.

Table titled 'RESULTS AT A GLANCE—in £'000' showing turnover, profit before tax, profit after tax, earnings per share, and dividends per share for 1983 and 1982.

Some points made by the Chairman, Mr. Patrick Townsend, early in December, 1983.

- Total sales volume marginally up on previous year with Sialom Lager the star performer. Improved performance by managed houses, hotels and restaurants. Continuing expansion of trading areas into Yorkshire and the North East. Accelerated pace of improvement to our pubs, hotels and restaurants continues. Acquisition of John Smith's Carlisle estate, giving us a net increase of 18 pubs, will be effected in January, 1984.

Mountleigh Group plc. PROPERTY INVESTMENT AND DEVELOPMENT COMPANY. Interim Results. SUBSTANTIAL PROFIT INCREASE. Results in brief 6 months to 31st October (Unaudited) April - (Audited) 1983 1982 1983.

Granville & Co. Limited. Member of NASDMM. 27/28 Lovat Lane London EC3R 8EB Telephone 01-421 1212. Over-the-Counter Market. Table with columns for company, price, change, and yield.

# Accountancy Appointments

## Accounting Director

Gloucester

c.£20,000 + car



Arthur Young McClelland Moores & Co.  
A MEMBER OF AMSA IN EUROPE AND ARTHUR YOUNG INTERNATIONAL

Trident Life is a leader in the UK Unit-Linked Life Assurance industry, part of a \$4bn US corporation and growing rapidly with plans for substantial future development. The Company wish to recruit an Accounting Director to help inspire and control this expansion and who will operate at a senior level. This position will report to a Main Board Director, taking full responsibility for accounting, internal control procedures and taxation. The major task is to provide reliable management information, allowing decisions to be made quickly and with confidence. Maximising the use of cash resources, and involvement in planning the company's growth will present further challenges. The person appointed will have the satisfaction of measuring his or her success through tangible achievement.

Candidates must be qualified accountants, around 35, who can demonstrate a successful career in a progressive, profit-conscious environment, where sophisticated financial reporting is a significant management tool. A professional, enthusiastic, participative approach would fit well with the management team. Experience of insurance or a financial institution would be useful, but is not essential. Please reply in confidence giving concise career and personal details and quoting Ref. ER666/FT to P.J. Williamson, Executive Selection.

Arthur Young McClelland Moores & Co., Management Consultants, Rolls House, 7 Rolls Buildings, Fetter Lane, London EC4A 1NH.

## Accountants for Consultancy

London Based - Age 26-33

We are looking for high calibre graduate accountants from well run organisations in the private or the public sector, to join our UK management consultancy practice based in London.

The work is varied and ranges from helping to develop business strategies to designing and implementing computer based financial planning and control systems, for all types of enterprises in Britain and abroad.

Of particular interest to us at this time are people from the manufacturing, oil, high technology, retail and banking industries.

We are looking for outstanding individuals and our remuneration package - which at appropriate grades includes a car - is designed accordingly. Career prospects are excellent.

Please write, quoting reference AIA4, to M.J.H. Coney, Peat, Marwick, Mitchell & Co., Management Consultants, 163 Queen Victoria Street, Blackfriars, London EC4V 3PD.

PEAT  
MARWICK

## Audit Manager

C. London c.£15,000

Established 8 partner firm with mixed portfolio of clients seeks well qualified young ACA from a larger firm to strengthen their team. Excellent opportunity to exercise your own judgment and thereby achieve personal development within a growing practice.

Contact

Patrick Donnelly on 01-222 5169 quoting ref. FT/10

tfi The Finance Index  
Financial Recruitment Consultants  
11, Palmer Street, London SW1W 0AB  
Tel: 01-222 5169/181

## Young Management Accountant

for a major international computer manufacturer

c.£12,000 p.a. Reading, Berks

As the world's No. 2 computer manufacturer Digital are without doubt, one of the most successful companies in Britain today. This is due in no small part to our UK Services function and the team of professionals who support its operation.

We are now looking for a young finalist or newly-qualified Accountant to support the management team responsible for our Northern Services operation.

Based at our Head Office in Reading it's a role in which you'll be liaising with all levels of management in order to provide detailed revenue, external profit before tax and accounts receivable analyses and forecasts.

Ours is a small, informal team, where you will be expected to communicate and present to management at all levels. Probably in your mid/late 20s, you will

therefore need around 5 years' experience in financial accounting/management reporting gained within a major international organisation together with the personal and professional confidence to gain credibility at senior management level. Experience of, or a distinct interest in, financial modelling is essential.

The position allows for a great deal of independence and offers excellent prospects for career development.

In addition to an attractive salary of c.£12,000 pa you can expect a wide range of big company benefits and relocation expenses will be paid where appropriate.

We also have opportunities for Financial Analysts/Management Accountants to join our Logistics/European Software Engineering functions.

Please telephone for an application form or write with full c.v. to Joe Ritchie, Services Finance Manager, Digital Equipment Co. Limited, PO Box 140, Digital Park, Reading, Berks. Tel: Reading (0734) 853890. Ref: BFS/JR/SWW.

digital

## Group Financial Director

Richmond £27,500 + car + profit share

Our client, a privately-owned group, with considerable interests in the property and construction sectors, has a current turnover in excess of £25 million. A commercially-minded financial executive is sought to take a position on the Main Board and to control the financial, legal and secretarial functions.

Candidates will be Chartered Accountants with proven technical expertise, ideally gained in a construction, property, or related field; age indicator 35-45 years. Reporting to the Group Managing Director, particular importance is laid on the taxation and treasury aspect of the role; principal areas of responsibility include:

- ★ Effective tax planning.
- ★ Controlling cash borrowings and negotiating facilities with financial institutions and monitoring their use.
- ★ Involvement with supervising investigations on prospective acquisitions and negotiating disposals.

For the successful applicant the remuneration package is highly attractive and includes equity participation and a profit share scheme.

Candidates should write to Nigel Hopkins, FCA, enclosing a comprehensive curriculum vitae, quoting ref. 963 at P.O. Box 143, 31 Southampton Row, London WC1B 5HY.



Michael Page Partnership  
International Recruitment Consultants  
London New York  
Birmingham Manchester Leeds Glasgow

ACCOUNTANCY  
APPOINTMENTS  
APPEAR EVERY  
THURSDAY  
RATE £34.50

per single column centimetre

Civil Service College

## Accountancy and Internal Audit Lecturers and Senior Lecturers

The College provides a wide range of management and development training for civil servants at all management levels.

There are 4 posts based either at Sunningdale, Berks, or London SW1, which involve the preparation and presentation of lectures and tutorials for a range of mainly short, practical courses connected with various aspects of accountancy and Internal Audit, as follows.

### Finance and Accountancy (Senior Lecturers)

... design, development, planning and direction of Finance and Accountancy (Management Appreciation) courses for those who require an understanding of the principles, concepts and techniques of financial accounting, cost and management accounting and government accounting.

Candidates should have wide and up-to-date accountancy knowledge and experience.

### Internal Audit (Senior Lecturer)

... design, development, planning and direction of Systems Audit courses covering basic concepts and techniques for trainee Internal Auditors and Audit Management courses for audit supervisors and managers.

### Computer Audit (Lecturer - 2 posts)

... preparation and presentation of lectures covering internal controls systems approach; audit techniques; auditing computer installations, systems and applications; use of interrogation packages.

For the audit posts, candidates must have at least 2 years' practical experience in systems audit; and qualifications in computer systems analysis and computer programming will be advantageous.

For all posts candidates should preferably be members of ICA, ICMA, ACA or CIPFA, but those without formal qualifications who possess specialised knowledge and experience of particular value, may also be considered. Teaching experience preferably in the field of adult education is desirable.

Appointments will normally be for a period of 5 years, with the possibility of extension or conversion to permanent appointments. Secondment for not less than 2 years may be considered in appropriate cases.

Salary: Senior Lecturer, £13,645 - £17,905; Lecturer, £11,325 - £13,765.

For further details and an application form (to be returned by 3 February 1984) write to Civil Service Commission, Alencon Link, Basingstoke, Hants, RG21 1JB, or telephone Basingstoke (0256) 68551 (answering service operates outside office hours). Please quote ref: G/6945/3.

## Chief Accountant

Central London c.£15,000 + car

Our client, a highly profitable international consumer products group, seeks a Chief Accountant to take responsibility for a sizeable accounting function. Reporting to the Financial Controller, this role encompasses a wide range of accounting tasks in support of domestic and worldwide retail and wholesale activities.

Candidates, aged 28-32, will be graduate qualified accountants with first class management skills. Previous computer experience is required to work with corporate computer-based accounting systems. Furthermore, exposure to a progressive commercial environment together with foreign currency transactions is highly desirable. Working within a highly professional team, technical expertise, ambition and the ability to make a positive contribution within this developing group are vital factors.

The negotiable salary is accompanied by a comprehensive benefits package and excellent career advancement prospects.

Candidates should write enclosing a comprehensive c.v. to Andrew Sales, FCCA, quoting ref. BX503, P.O. Box 143, 31 Southampton Row, London WC1B 5HY. Please indicate any companies to which your application should not be forwarded.



Michael Page Partnership  
International Recruitment Consultants  
London New York  
Birmingham Manchester Leeds Glasgow

## ACCOUNTANCY APPOINTMENTS

EUROPEAN AUDIT MANAGER c.£22,000

A major U.S. petrochemical company is seeking an Audit Manager to take full responsibility for auditing international operations in the U.K., Europe, Africa and the Middle East. This key management appointment offers progression to a senior line position, as demonstrated by two previous incumbents. Suitable candidates are likely to be Chartered Accountants with extensive international audit experience at supervisory level, gained either within the profession or industry. BASED C. LONDON. Ref: JG.

F. D. DESIGNATE £18,000+

As a member of the management team the job holder will have responsibility for the financial and commercial direction of this medium-sized group in the consumer sector. Candidates should have good line accounting experience coupled with commitment and excellent communicative ability. They should be qualified accountants, aged 30-40 years, able to carve out their own career path. CITY. Ref: SC.

MANAGEMENT ACCOUNTANT £13,000

A leading insurance company requires a young ACMA to join its Head Office finance team. Reporting to the Financial Controller the duties will encompass the review and co-ordination of all management information for its operating companies. Promotion prospects are excellent. N.E. LONDON. Ref: TAW.

BUILDING SOCIETY £12,000 + Benefits

This newly created position in the Head Office of a leading Building Society would suit a young qualified ACA/ACCA seeking a career move. Responsibilities include systems development, project work and investigations. Applicants should be articulate and interested in computers. Mortgage subsidy and other benefits. LONDON. Ref: CW.

ROBERT HALF

LEE HOUSE, LONDON WALL, EC2 0J 606 6771

THE OPEN UNIVERSITY

## Director of Finance

Applications are invited from qualified accountants with appropriate senior experience for the post of Director of Finance of the Open University. The successful applicant will be expected to take up appointment as soon as possible after 1st March 1984. Salary will be at UAP Grade IV on a level commensurate with the seniority of the post and the experience of the successful candidate; the post is likely to be attractive financially to those currently earning up to £21,000 pa. The Open University provides higher education in all parts of the United Kingdom to more than 85,000 students. It is directly funded by the Department of Education and Science, and its total expenditure in 1983 was approximately £73 million. The Director of Finance is responsible for the provision of management and financial accounting services and is a member of the University's senior administrative team. Further particulars relating to the post are available from the Secretary (2763/2), The Open University, Walton Hall, Milton Keynes MK7 6AA, or telephone Milton Keynes (0790) 65213; there is a 24-hour answering service on 653868. Closing date for applications: 30th January.

## Accountants

INVESTIGATION & APPRAISAL - MANCHESTER

These positions represent a first class opportunity for qualified accountants from industry or commerce, probably in their middle to late 20's, to gain experience in front line investigation and assessment of companies in the North West. There are good career development prospects for those who aspire to them. Our client is one of the top twenty UK accounting firms whose activities in non-audit areas such as receiverships, acquisitions, share valuations, flotations, management buy-outs, are expanding fast. The workload is varied and stimulating

and requires commitment and self-motivation. Candidates, male or female, must have the skills to prepare accurate appraisals and offer effective advice, based on broad practical accounting experience gained quite possibly in smaller companies. The salary and benefits package is fully competitive and designed to attract the best. Central Manchester base. Please send career details, in confidence, to D. A. Ravenscroft, Bull, Holmes (Management) Limited, 20 Albert Square, Manchester M2 5PE.

Bull  
Holmes

PERSONNEL ADVISERS

## Financial Manager

Borehamwood, Herts c.£17,000 + car

As a result of internal promotion our client, a principal manufacturing subsidiary (T/O £23m) of a major international group has created a vacancy for a Financial Manager. The successful candidate, supported by a staff of 30, will report to the local Managing Director and be a member of the local management committee. Responsible for the total accounting function he/she will also be in charge of data processing (which covers all business systems). Candidates, aged 30-35, must be Chartered Accountants, preferably with a degree, who have gained a minimum of three years' industrial experience. The group offers excellent opportunities for promotion, including transfer into general management. Ref: 1284/FT. Write or telephone for an application form or send full details to R.P. Carpenter, FCA, FCMA, ACIS, 2-5 Old Bond Street, London W1X 3TB. Tel: 01-493 0156 (24 hours).

Phillips & Carpenter  
Selection Consultants

# Accountancy Appointments

## Financial Controller

c.£15,000 + Car  
South West

Fast moving engineering products provide an excellent environment to develop and apply financial control and analytical skills; this company is no exception. The business has a turnover in excess of £20 million and is part of the European operations of a major US multi-national; as such key controls are pinpointed from the strategic level to the shop floor and market opportunities both short and long term are met with a quick response.

The Financial Controller will be a committed member of management, contributing to commercial decisions on pricing, product ranges, cost improvement, resource allocation and the business strategy. There is responsibility for accurate and fast control data, financial accounting, systems development and the control of 18 staff in local accounting and DP departments.

Applicants should be qualified accountants (preferably graduate ACMA's) with a grounding in management and cost accounting and experience of systems development in a similar type of fast moving engineering business. Preferred age 30-40. Relocation assistance is available.

Please apply in confidence, quoting LB9, to:

Brian H Mason  
Mason & Nurse Associates  
1 Lancaster Place  
Strand  
London WC2E 7EB  
Tel: 01-240 7805

**Mason & Nurse**  
Selection & Search



## FINANCE & ADMINISTRATION

Early 30s £17,500 + car + benefits  
North London

A leading company in the financial sector needs an experienced and capable manager to take responsibility for the accounting and secretarial functions.

Reporting to the Finance Director and Company Secretary, the responsibilities will include:

- managing the accounting and secretarial functions
- ensuring that an effective system of management accounting and financial reporting is maintained
- preparing the Annual Reports and Accounts.

Candidates should be Chartered Accountants with sound experience in accounting and secretarial matters, ideally gained in the financial sector. The salary is about £17,500 and there is a car as well as attractive fringe benefits, including non contributory pension scheme and assistance with mortgage after a qualifying period.

Please send a comprehensive career résumé including salary history and day-time telephone number, quoting ref: 2143, to W. L. Tait.

*Touche Ross & Co., Management Consultants*

Hill House 1 Little New Street London EC4A 3TR  
Telephone: 01-353 8011

## Finance director

West Yorkshire, c.£17,500 + executive car



For a consumer products manufacturer operating in a growth market and currently turning over some £15m.

Reporting to the General Manager, you will assume full responsibility for all aspects of a well established finance function, including data processing. You will play a major role in company decision making and will be expected to find ways of improving bottom line performance further still.

Qualified and in your 30s you should be commercially aware and have a successful track record in the financial management of manufacturing companies.

Résumés including a daytime telephone number to Victor Luck, Executive Selection Division, Ref. L312.

**Coopers & Lybrand associates**

Coopers & Lybrand Associates Limited  
management consultants

Scottish Mutual House  
Park Row Leeds LS1 5JG

## ACCOUNTANCY APPOINTMENTS

APPEAR EVERY THURSDAY

RATE £34.50 PER SINGLE COLUMN CENTIMETRE

## European Systems Specialist

International Travel Age Indicator c.30 £13-17,000 + expenses  
(Home Base Possible) (+ relocation if req'd)

Our client, a major US multinational with annual sales of \$10 billion worldwide, is engaged predominantly in the food and consumer goods sectors. Its products enjoy market leader status and are household names in their own right.

They now seek a qualified accountant with several years post qualification experience in systems development and/or computer audit to join a small multi-discipline team reviewing the development and operation of European systems.

The successful incumbent's contribution will be the appraisal of controls re existing/proposed systems and hardware; together with operational procedures and support work for line management.

A positive commercial attitude is essential as is the ability to win the confidence of senior management and to relate to local business needs.

Candidates should write, enclosing a comprehensive c.v., to Adrian Wheale, ACMA, ACIS at 24 Bennetts Hill, Birmingham B2 5QP.



**Michael Page Partnership**  
International Recruitment Consultants  
London New York  
Birmingham Manchester Leeds Glasgow

## International Service Organisation

### Chief Accountant

c.£18,000 West London

From their modern well equipped West London base, my client markets and distributes the films of Hollywood's largest studios to all parts of the world. This \$400m business is complex, dynamic, highly profitable and growing aggressively. At the centre of a sophisticated worldwide network is a young, informal team of finance professionals who understand that a modern, responsive financial operation must achieve a balance between control and service.

Following an internal promotion, the Director of Group Accounting wants to appoint a new young Head Office Chief Accountant with the capacity to grow rapidly within the company. The role is so important to the continued growth of the business that we offer no apology for a tight specification.

You'll be an ACA and preferably a graduate, aged between 28-34, with a minimum of 3 years experience in a sophisticated international service business. You will naturally be familiar with computerised systems and have worked with multi-currency accounting records. Having proved your man management skills, you are ready for a move that is not only positive in its own right, but must also be judged in the context of the prospects it offers you as an ambitious achiever.

To find out more contact Richard Goldie on (0992) 552552 or write to me, enclosing a brief CV, at Macmillan Davies Personnel Consultants, The Old Vaults, Parliament Square, Hertford SG14 1PL.

*Macmillan Davies*  
Personnel Consultants



## Financial Controller

Central London £25,000 + car

Our client is a wholly-owned subsidiary of a leading US multi-national which designs and manufactures computer equipment as well as providing a wide range of support services; turnover is in excess of £100 million. Due to re-organisation, this newly-created position will play a major part in the operation's financial management. Personality is a key factor in this appointment and it is unlikely that anyone under the age of 30 will have the necessary qualities or experience to fill the role. Candidates will be qualified Accountants and have gained exposure to an f.m.c.g. or marketing environment and should possess the expertise and personal qualities to:

- ★ Implement financial analysis, planning and reporting
- ★ Establish effective interfaces with senior executives at operational and corporate levels
- ★ Ensure the effectiveness of D.E. systems
- ★ Appreciate the ever-changing requirements of a developing and progressing environment.

Reporting to the Group Financial Director, this role will offer a rewarding challenge within a successful company. Candidates should write enclosing a comprehensive curriculum vitae to Nigel Hopkins, FCA, quoting ref 966, P.O. Box 143, 31 Southampton Row, London WC1B 5HY.



**Michael Page Partnership**  
International Recruitment Consultants  
London New York  
Birmingham Manchester Leeds Glasgow

## Management Accountant

Leading European Retail Group

Central London c. £13,000 + benefits

A medium sized, expanding US owned Company, our Client is at the centre of the Groups European Operations. Growth is both the key to the groups vitality and a primary element in its marketing strategy.

As a result of growth, this newly created position calls for a young Accountant to report to the Assistant Controller. You will have extensive involvement in management accounts, budgets, capital expenditure control, analysing problems and recommending necessary action to management. The company utilises sophisticated computerised accounting and control systems.

Ideally you will be a graduate qualified Accountant, with the confidence, initiative and necessary potential to progress within this young dynamic management team.

To apply please telephone or write to Jacqueline Boyd quoting ref 18 7040.



**Lloyd Chapman Associates**

123, New Bond Street, London W1Y 0HR 01-499 7761

## CHIEF ACCOUNTANT

c. £14,000 p.a. + benefits

The Social Workers Pension Fund is a centralised fund with 6,000 members and over 900 participating voluntary organisations. Current annual income is about £11 million, with assets in excess of £80 million. The Fund has a sophisticated Datapoint 8800 computer system and all programming and systems development is carried out in-house.

Reporting to the Fund Manager, the Chief Accountant will be responsible for all financial and management accounting, systems initiation and development and supervision of a small team of staff.

Applicants must be qualified (Chartered or Certified) with commercial experience including supervision of staff. Preference will be given to those applicants who are familiar with the requirements of pension funds and have experience of a computerised accounting system.

Please write, with full personal, career and salary details to:-

PERSONAL  
R. K. Strend  
Fund Manager  
SOCIAL WORKERS PENSION FUND  
93/95 Borough High Street  
London SE1 1NL



## Financial Accounting Manager

c.£14,000 + car Reading

Nabisco Brands Smiths Division, part of the successful multi-national Nabisco Brands group, produce and market a wide range of snack food products under the Smiths, Tudor, Planters and Big D brand names.

Organisational growth and the requirement for ever greater speed and integrity of information has created a new opening for a professional who can make a positive contribution to our effective financial control.

Based in Reading, but liaising closely with the Group Head Office and regional operating units, you will specifically control the financial accounts, including the purchase ledger function in a company with a turnover of around £120M. You will constantly monitor and improve procedures for the company's multi-locational

activities, personally contributing to the business through cash management and control. You will be aided by sophisticated data processing facilities.

Aged between 28 and 35 you will be a qualified accountant who can combine at least 3 years post qualification experience with a sound commercial awareness. A confident leader and communicator you must be capable of advising and motivating a small but dedicated team and of establishing credibility of board level. Effective under pressure you will demonstrate the qualities that relate to a sales led company and the potential to progress in a fast moving environment.

The remuneration and benefits package will reflect your calibre and relocation assistance is available. The right man or woman will find the informal working atmosphere stimulating and the career scope outstanding.

Please send details to Martina Doherty, Nabisco Brands Smiths Division, 121 Kings Road, Reading, RG1 3EF or telephone her on 0734 583566.



# Accountancy Appointments

## Financial management consultancy

**A challenging career move**  
London based, up to £23,000 + car



As one of the largest and most diverse firms of management consultants, we work with many types of organisations in tackling a wide range of business and management problems. We are looking for further experienced accountants who want to widen their experience and who seek a greater challenge.

### you must be...

- aged 28 to 34
- a graduate accountant, with at least 3 years' experience in industry/commerce
- able to show real achievement in your career to date
- keen to extend your experience and improve your skills.

### we offer...

- the opportunity to develop and broaden the skills essential for your future career in senior management
- a stimulating, multi-disciplinary environment
- exposure to the latest business, financial and DP techniques
- opportunities to work overseas - short or long term
- rapid career and earnings progression.

Résumés including a daytime telephone number should be sent to C R Williams, Director, quoting Ref. F20/79.

**Coopers & Lybrand associates**

Coopers & Lybrand Associates Limited  
management consultants

FleetWay House, 25 Farringdon Street,  
London EC4A 4AQ.

## Special Project Accountant

Surrey c £12,500 + car

A nationally known service company committed to the enhancement of computerised financial systems seeks a qualified accountant age 28-35 years for a challenging role. Liaising with management of all levels and disciplines you will have responsibility for the design, implementation and control of a nationwide asset control programme (value £11m+). Accordingly, in addition to technical ability an outward going personality combined with flexible tenacity is called for. Success in this position should lead to a senior management appointment within 3 years. Salary will not be a limiting factor for the right candidate.

Contact Patrick Donnelly on 01-222 5169 quoting ref. FT/11

**tfi The Finance Index**  
Financial Recruitment Consultants  
11, Palace Street, London SW1H 0AB  
Tel: 01-222 5167/181

## Hoggett Bowers

*Executive Selection Consultants*  
BIRMINGHAM, CARDIFF, GLASGOW, LEEDS, LONDON, MANCHESTER, NEWCASTLE and SHEFFIELD

### Financial Director

Leeds, c.£27,500 + car etc

Our client, a subsidiary of a British public company, is the parent of a well established £7 million turnover group engaged internationally in consultancy and project management for the civil, mechanical, electrical and process engineering industries. The new appointment of a Financial Director reflects the need to strengthen head office management within this group whose members have to date operated with a high level of financial autonomy. The successful candidate will have full authority to review all systems for financial control, budgeting, short and long term forecasting, introduce commercial disciplines and guide the group into business sectors with maximum profit potential. Candidates, preferably aged 35-45, should have held a significant financial management position within a contracting or engineering company and combine commercial skills with sound financial technique and outstanding leadership qualities.

H.W. FitzHugh, Ref: 20219/FT. Male or female candidates should telephone in confidence for a Personal History Form 01-734 6853, Sutherland House, 5/8 Argyll Street, LONDON, W1E 6EZ.

## Divisional Controller

### Project Evaluation & Control

Essex

c.£18,000 + car



**Arthur Young McClelland Moores & Co.**

A MEMBER OF AMSA IN EUROPE AND ARTHUR YOUNG INTERNATIONAL

The company, with a turnover in excess of £30m, is a UK market leader in providing industrial services to the private and public sectors. It has a commitment to growth and a proven performance in achieving objectives. A factor in its success is the ability to win sizeable long-term contracts, often involving substantial front-end capital investment.

This new position reports to a divisional director and takes responsibility for co-ordinating the work of a team of technical and engineering specialists when assessing new opportunities. This will involve personal input to commercial and financial aspects of the projects and summarising the team's findings into board-level recommendations. In addition there will be line responsibility for reporting on divisional operating performance.

The need is for a qualified accountant with several years direct experience of major project evaluations in an industrial or construction environment. Candidates must demonstrate strong commercial insight, supplementing technical analytical abilities. Personal qualities required include energy, confidence, maturity and skill in communication. The ability to lead and motivate a peer group is essential. Age: around 35.

Please write in confidence giving concise career and personal details and quoting Ref. ER650/FT to P.J. Williamson, Executive Selection.

Arthur Young McClelland Moores & Co., Management Consultants, Rolls House, 7 Rolls Buildings, Fetter Lane, London EC4A 1NH.

## TAX PARTNER DESIGNATE — SINGAPORE

FCA's/FTII/ATI/  
Ex Revenue aged 40+

C. Sing \$150,000  
(£50,000 pa)

We have been retained exclusively by the Singapore office of Ernst & Whinney which is looking for a Senior Tax Specialist of outstanding ability to join their expanding Tax Department which presently comprises 40 professional staff.

The work is highly demanding and calls for a breadth of experience and knowledge that is unlikely to have been gained by anyone under the age of 40 and who has not been in the tax field for the greater part of their working life. The successful candidate will be professionally qualified or be of Senior Revenue grade.

Experience of specialised industries will be of advantage, but equally important are capabilities in:

- staff management and organisation
- budget and cost control
- developing systems, procedures and training programmes for tax staff
- public speaking at seminars and conferences

An attractive remuneration package is offered and future prospects are excellent. The successful candidate will, from the outset, play a leading role in the tax department and may expect admission to partnership within two years.

All applications will be treated in strict confidence. For more information please telephone or write giving full career details to George Ommrod BA (Oxon) at our London address or Brian Marren BA at our Glasgow address, quoting Reference No: 4298.

410 Strand, London WC2R 0NS. Tel: 01-836 9501  
26 West Nile Street, Glasgow G1 2PF. Tel: 041-226 3101  
3 Coates Place, Edinburgh EH3 7AA. Tel: 031-225 7744

**DOUGLAS LAMBIA**  
Douglas Lambias Associates Limited  
Accountancy & Management  
Recruitment Consultants



## JAGUAR'S NEW TREASURY DEPARTMENT

—Demands Finance Skills we can bank on.

As a further step in the development of our finance function we wish to make the following key new appointments in our recently established Treasury Department.

### STERLING/FOREIGN EXCHANGE DEALER

up to £12,000 + lease car

You will have plenty of scope to make a major impact on the development of Treasury policies for Sterling Investment and Borrowing. This together with Foreign Exchange Exposure and the development of sizeable and sophisticated Sterling and Foreign Exchange "Books" offers a breadth of involvement rarely to be found.

At least 2 years dealing experience managing a Sterling and/or FOREX Book is, therefore, essential and this should have been gained in a Bank, Institution, Local Government or Corporate Treasury. A minimum of 5 years (including the above) in a Finance, Treasury or Dealing function is also called for.

### TREASURY ACCOUNTANT

up to £10,400 + lease car

Developing new Treasury systems and handling Ad Hoc Corporate Finance assignments will enable you to make full use of your innovative skills.

This will involve the production of cash flow forecasts and the management of funds movements to meet Company requirements and maximise the funding available to the Sterling/FX Dealer.

The appointment will ideally suit a graduate qualified accountant with at least 5 years commercial experience.

Reporting directly to the Treasurer these Coventry based appointments offer a comprehensive benefit package including attractive bonus payment and pension scheme, discounted car purchase, 25 days holiday plus relocation where appropriate.

Please write in confidence giving full career details and current salary to:

Mr. P. Whurr,  
Co-ordinator, Organisation and Personnel Planning,  
Jaguar Cars Limited,  
Browns Lane, Millisle, Coventry CV3 9DF.



We are an equal opportunity employer.

## International Corporate Consultancy

London Based



Up to £15,000

PEPSICO are a multinational organisation involved in beverages, food products, food services, sporting goods and transportation with a group turnover of approximately \$ billion dollars.

Their European corporate review team is responsible for advising on a wide range of financial and management procedures and controls. As a result of the group's policy to promote from this division, they now seek to appoint a qualified ACA aged up to 27 with good public practice background.

Proficiency in a second language is ideally required, preferably Spanish, French or German. Based in London, approximately 50% of your time will be spent visiting company locations worldwide.

An excellent salary package is offered plus genuine opportunities for promotion within 2/3 years. To apply, please write or telephone Michael J. R. Chapman quoting ref 7451.

**Lloyd Chapman Associates**

125, New Bond Street, London W1Y 0HR 01-499 7761

## Chief Accountant

Northern Home Counties  
c.£17,000

This highly successful, profitable and progressive British manufacturer is an acknowledged leader in its field with a worldwide turnover of around £55m.

In this new appointment you will be responsible for the Finance Director for managing a 20-strong department dealing with all financial and management accounting matters, insurance and corporate taxation.

A qualified accountant in your mid-30s, you must have at least three years' industrial experience at a similar level, preferably in a manufacturing environment. A knowledge of computer-based systems and well-developed management skills are essential.

The salary is supported by a range of benefits associated with a multinational company including generous assistance where appropriate.

Please send full cv, which will be forwarded to our client unopened, quoting ref: R2928/FT. (Address to our Security Manager if listing companies to which it should not be sent.)

**PA**  
PA Advertising

Hyde Park House, 60a Knightsbridge, London SW1X 7LE.  
Tel: 01-235 6060 Telex: 27874

## Group Planning

Midlands

from £15,000 + car

Our client is a major UK group with a substantial turnover derived from interests in consumer products and leisure activities. It is based in an attractive area offering excellent recreational facilities.

The financial planning department plays a vital role in the development of the group's activities and in order to strengthen this a Graduate Chartered Accountant aged

25-30 with previous experience within a large company environment is required. Prospects are particularly attractive - the successful applicant's career should develop further at group level or in a line function. The package offered includes all the benefits normally associated with a major organisation.

Contact John P Sleight FCCA  
on 01-405 3499  
quoting ref J70/GF

**Lloyd Management**

125 High Holborn London WC1V 6QA Selection Consultants 01-405 3499

## Tax Manager

Oil Industry

London

c£20,000 + car

Our client is a British independent oil company with numerous expanding worldwide on and offshore exploration and production interests. It now seeks a Tax Manager, preferably a qualified Accountant, with proven tax experience gained in the oil industry or a professional firm with relevant clients.

Reporting to the Financial Director and working closely with financial and operational management,

emphasis will be on tax planning and advice for current projects and future developments and acquisitions. You will also be responsible for all compliance work.

This is a key position enabling you to make an identifiable contribution to the company's development.

Contact David Tod BSc, FCA  
on 01-405 3499  
quoting ref D/3 1/TF

**Lloyd Management**

125 High Holborn London WC1V 6QA Selection Consultants 01-405 3499

## Redbridge

London Borough

### Management Information Project PROJECT MANAGER

Salary up to £18,261

We wish to recruit a qualified accountant as a manager for a major project being undertaken to review our computer based systems and significantly improve the information supplied to Members and Officers.

The manager will lead a team responsible for:-

- Formulating new charts of account and reporting structures.
- Replacing existing computer systems with proven software packages.
- Developing the computer as a valuable source of information to management.

Initially a three year contract is offered, together with the opportunity to gain experience in a key area of development for local government which will make a significant contribution to future career progression.

For further information and application form, please contact Alan Palmer, Personnel Assistant to the Chief Executive, telephone 01-478-3020 extension 140.

Closing date: 31st January 1984



# Accountancy Appointments

## Oil Industry

recently qualified accountant

London

c£13,000 + car

A British independent oil company with widespread exploration and production interests seeks a Project Accountant, preferably aged mid/late 20's with two years post qualification commercial experience.

As a member of a small team, you will be responsible for all financial aspects of specific oil production ventures, working closely with the computing, tax and

financial accounting sections.

Previous oil industry experience is not essential. However applicants must have sound practical accounting experience and strong communication skills in order to provide a vital link between the financial and production management of the company and its partners.

Contact David Tod BSc, FCA on 01-405 3499 quoting ref D/33/KF

**Lloyd Management**

125 High Holborn London WC1V 6QA Selection Consultants 01-405 3499

## Accountant

Corporate Administration

London • from £16,000 + mortgage subsidy

Our client provides corporate services to a number of publicly quoted investment trusts and other companies who have interests in oil and gas, agricultural and commercial property and other financial activities.

A qualified accountant aged c28/35 is required to assist the Financial Director with all aspects of corporate administration including the accounting, taxation and secretarial functions. Managing an accounts team

you will be responsible for management and statutory information and play a central role in a major computerisation project.

This is a responsible and challenging position providing an opportunity to gain wide experience of City operations. The prospects are excellent and remuneration package outstanding.

Contact David Tod BSc, FCA on 01-405 3499 quoting ref D/30/AF

**Lloyd Management**

125 High Holborn London WC1V 6QA Selection Consultants 01-405 3499

## Tax Manager

c.£20,000

N.E. Hampshire

An outstanding young tax specialist (aged late 20's) is required to take responsibility for all aspects of taxation for the UK companies of a major high technology multinational. The business entities concerned have a turnover of £100 million and are vigorously managed, thus creating an active environment for tax management. There are substantial cross border activities.

The successful applicant will have the experience and ability to handle the role in a positive manner and the personal qualities to be accepted as an active member of management. The Group give responsibility to management at an unusually early age and movement across disciplines is accepted. Prospects will not therefore be confined to either tax management or UK operations.

The position will be based in an accessible part of North East Hampshire. Relocation assistance is available if necessary.

Please apply in confidence, quoting ref. L 90, to:

Brian H Mason  
Mason & Nurse Associates  
1 Lancaster Place  
Strand  
London WC2E 7EB  
Tel: 01-240 7805

**Mason & Nurse**

Selection & Search

## Operational Audit

European Group

Central London

c£14,000 + car

Our client, the European division of a growth oriented US Retail Group wishes to recruit a young dynamic Accountant to join their European Control Function.

Working within a young professional team you will enjoy a wide and influential role encompassing the review of financial and operational systems, procedures and controls of the UK company's Head Office and its retail outlets. In addition you will be responsible for highlighting, reporting and problem solving potential areas of concern. Currently the company is planning the installation of EPOS at store level, and a new central computer at Head Office. You will be expected to be heavily involved in both areas during your first six months.

This position will appeal if you are looking to gain experience in a fast moving environment and have the self-motivation, ambition and interpersonal skills necessary to fulfill this truly challenging and responsible position.

To apply please telephone or write to Jacqueline Boyd quoting ref JB 7141.

**Lloyd Chapman Associates**

123, New Bond Street, London W1Y 0HR 01-499 7761

## Financial Director

Hampshire

c£15,000 + Car

A subsidiary of a British blue-chip group, the Company employs 200 people and has a budgeted turnover for 1984 of around £1.4m.

A healthy order book and the rapidly growing demands of a buoyant world market, together with the development and introduction of new products, provide an exciting and challenging environment.

Whilst playing an active role as a member of a highly professional management team, you will be responsible for the financial management of the company and for the provision of all financial and management information.

A qualified Accountant, aged between 35 and 50, you must have sound management experience in a manufacturing environment relying on the use of computerised systems with a bias towards management accounting and forecasting. Secretarial experience although not essential, would be extremely useful.

Terms of employment are excellent and include five weeks holiday, private health insurance, an executive car and generous assistance with relocation where appropriate.

To apply please write to David Lloyd enclosing full Curriculum Vitae quoting reference FT7448.

**Lloyd Chapman Associates**

123, New Bond Street, London W1Y 0HR 01-499 7761

## Financial Control Assistant Manager

c £13,000 p.a.

City

This is an exceptional career opportunity for a young accountant to join the export finance subsidiary of a major UK bank.

Responsibility will be to the Financial Control Manager for a wide diversity of financial and management reporting and the development of computerised accounting systems. The ability to manage staff is essential.

Eligible candidates, preferably Chartered Accountants, must have a proven ability in the preparation of financial accounts and statements and ideally experience with finance companies, foreign exchange transactions and computer based systems.

Applications in confidence under ref: 6680 to Brian G. Luxton.

**Mervyn Hughes Alexandre Tlc (International) Ltd.**  
Management Recruitment Consultants



37, Golden Square, London W1R 4AN. 01-434 4091.

## Director of Group Finance

London

c. £20,000 + Car

Our client is a rapidly expanding company in the printing and drawing office equipment industries.

This is an outstanding opportunity for a qualified accountant who has an industrial/commercial background. Candidates, who will be in an age range of 32-38, are likely to be presently responsible for the accounting function including the preparation of regular management and financial information.

The position reports directly to the Chairman. The selected candidate will have overall responsibility for all group financial matters and specific responsibilities will include preparation of the Group's financial and management accounts, as well as profit and cash planning. Involvement in management decisions is integral to the position and promotion to the Board may be expected.

The remuneration package includes an excellent salary plus car, as well as membership of BUPA and a pension scheme.

Please send a comprehensive résumé, including salary history and daytime telephone number to:

**MURRAY ROBINSON CONSULTANTS**  
8 Chichester House, Chichester Rents, Chancery Lane, London WC2A 1EJ.

## Kentucky Fried Chicken

### Financial Accounts Manager and Audit Manager

Kentucky Fried Chicken is one of the World's leading quick-service food groups, with both Franchisee and Company owned take-aways and restaurants throughout the UK.

Our continual expansion requires us to recruit Financial Management to be based at our new Head Office in Camberley, Surrey.

**Financial Accounts Manager** - Applicants should be ACA or TCA qualified with experience of man-management, preferably in an industrial environment, and ideally aged between 25-30.

**Audit Manager** - Applicants should have previous experience in auditing, be part-qualified to CMA/ACCA and prepared to travel extensively throughout the country. Successful applicants will have a confident and friendly personality, probably aged around 25 years and essentially willing to accept the hard work and unsocial hours expected. Salary will be individually negotiated and fringe benefits include a Company car, pension/life assurance scheme, free PPP and a thorough induction training into the business. Re-location expenses will be paid where necessary.

Please submit your application with current earnings:  
Ray Alder, Human Resources Director,  
Kentucky Fried Chicken (GB) Limited,  
Hawley Lane, Farnborough,  
Hampshire, GU14 8EG.



Equal Opportunity Employer M.F.

## Financial Manager - Insurance

c. £17,000 + Car

We have been retained by a rapidly expanding Lloyd's Broker, which is seeking a well qualified Accountant to report directly to the Financial Director, with full responsibility for management reporting systems and controls.

The ideal candidate, preferably in the age group 27 to 35, will have held a similar appointment with a leading Lloyd's Broker, involving compliance with Lloyd's solvency requirements, preparation of long and short term forecasts, with monthly variance analyses and the preparation and consolidation of statutory accounts.

He or she must be capable of liaising with auditors and dealing with all taxation matters, supervising the maintenance of the nominal ledger and payment of Company expenses.

The salary is negotiable around £17,000 p.a. plus Company Car, Private Medical Scheme and Contributory Pension Scheme.

Apply, in the first instance, quoting Ref: PMI 183 to R.W. Murphy, Hughes Owens & Hewitt Ltd., Executive Recruitment Consultants, 32, Savile Row, London, W1X 1AG. No information will be passed to our clients without the applicant's prior permission.

**HOH**  
HUGHES OWENS & HEWITT

## Financial Controller

up to £17,709 + car

P & O Ferries Ltd, a major channel ferry operator and part of the international P & O Group, require a qualified accountant to establish and manage a new accounting department in Dover which will take over and develop the present system operated in Southampton.

The Financial Controller will be expected to set up and manage a small accounting staff to assist the Route Director in all financial accounting and control related matters.

Besides possessing a recognised accounting qualification, we're looking for a professional with at least 3-4 years' experience in a number of accounting roles, preferably in the transport industry.

Essential to the position is a full knowledge of computerised accounting systems and their development as well as cash and stock control procedures.

Excellent career prospects and a rewarding remunerative package including generous company benefits are some of the advantages you will receive working for this progressive company.

Please write with full cv details by 26 January 1984, to Mr D J Whitehead, Personnel Manager, P & O Ferries Ltd, Beaufort House, St Bonolph Street, London EC3. Telephone 01 283 7272 Ext 3777.

**P&O Ferries**

## Director of Finance

LONDON

c. £16,000 + Car + Benefits

Our client is a leading Housing Association managing 4,000 dwellings and developing 300 each year including low cost home ownership initiatives.

A qualified accountant with at least five years experience is required to manage 16 staff including a computer unit. The successful applicant must demonstrate good communication and reporting skills as well as the ability to adapt to a rapidly changing environment.

As part of the Management team, headed by the Association's Director, the Director of Finance will have a central role advising on policy matters and negotiating with the association's financial backers.

Further details write or telephone:

HACAS Recruitment  
First Floor, St Richard's House  
114 Eversholt Street, London NW1 2TB  
Telephone: (01) 387 6192

## Accountant / Financial Director (Designate)

The position exists for an accountant to assume control and responsibility for all financial and accounting functions, including consolidated data processing utilising IBM system 23 installations. The company is a small rapidly expanding manufacturer of products by a specialised plastic moulding process. Activities are in both new products and custom mouldings. Markets include medical and surgical, laboratory, electronics, aerospace, consumer and industrial.

Applicants must be fully qualified ACA, ACCA or equivalent, preferably aged 28-40 years with experience of manufacturing industry at Management level. Experience on computer data processing is essential, some knowledge of systems analysis or programming in BASIC an advantage.

The post provides an excellent opportunity for an individual to develop a career structure whilst contributing to the long term success of the company. Salary and benefits fully negotiable.

Applications in writing, giving full career details to:  
Mr C. L. Peacher (Director)

**Peter Fanning (Plastics) Ltd**

Goldstone Laoc, Hove, East Sussex

# Accountancy Appointments

## Reed Executive

The Country's most successful Recruitment Service

### Management Accountant

**Kent** c £15,000 + car  
This is a stimulating opening for a qualified ACMA which carries quite definite BOARD PROSPECTS.

The company operates within the process industry and is one of a number which form a large division of a major international group.

It has a steady and profitable growth record and exports the major part of its production.

Reporting to the Managing Director you will be experienced in modern management reporting techniques and will be responsible for the whole accounting function, which is computerised.

Aged 35/45 you must be able to demonstrate technical competence coupled with initiative, commercial sense and Director potential.

Knowledge of batch costing and exporting are highly desirable.

Telephone 01-247 9431 (24hr service) quoting Reference 0914/FT.  
Reed Executive Selection Ltd., 122 Whitechapel High Street, London E1 7PT.

## FINANCE DIRECTOR

Edinburgh To £23,000

A major electrical engineering group, based in Edinburgh with operating units throughout the UK, is seeking a Finance Director. This challenging position offers significant scope, particularly in areas of financial control and systems development, within a manufacturing organisation which is currently undergoing substantial restructuring and strengthening. Candidates, 35-45, should be qualified accountants currently working in the engineering, electro/mechanical or civil engineering industries, with considerable knowledge of contract accounting for large capital projects and export finance. The successful candidate will be expected to relocate to the Edinburgh area. A generous relocation package is offered.

Job Ref: CLD 906

For confidential application form telephone Lorna Dinning on Newcastle (STD 0632) 328524 or forward CV to Vine House, Vine Lane, Newcastle upon Tyne, NE1 7PU.

NORTHERN  
RECRUITMENT  
GROUP

ACCOUNTANCY APPOINTMENTS

## Autolease

THE BIG PROFESSIONALS IN VEHICLE LEASING

### Finance Director Designate

**Birmingham** c. £15,000 + Car  
Autolease is an important subsidiary company of BSC International plc, a major U.K. public company, which has an annual turnover of £300 million. Its main activities are in vehicle leasing and vehicle sales to the fleet market. Growth has been particularly strong in 1983 and it is projected that this will continue in the current year. The new finance director designate will be a qualified accountant, aged 30-45, with commercial experience to administer the finance function of the company and, more importantly, to act as an integral part of the management team in this aggressive company. Familiarity with the use of computers is a requisite and vehicle leasing experience would be an advantage, although this is not essential. Prospects in this highly profitable company are excellent. A contributory pension scheme is operated and general relocation costs will be paid if appropriate.

Please write with a full curriculum vitae to:  
M. A. Gash  
KIDSONS  
Bank House, 8 Cherry Street  
Birmingham B2 5AD

## Chief Accountant

Basingstoke

IAL's Data Communications is an autonomous unit operating from new, purpose built premises at Basingstoke. It manufactures and sells Voice and Data Communications systems with a current turnover of £12M.

A move to self-accounting status creates the need for a Chief Accountant to take overall responsibility for the finance function.

The successful candidate will be a full member of the executive management team, reporting to the Chief Executive, and will be expected to play a key role in the total management and business decision making of the organisation.

We require a fully qualified Accountant, well versed in modern industrial accounting techniques

and used to producing a full range of accounts to tight timescales. The right man or woman will probably have had at least eight years post-qualification experience of computerised financial control and costing systems at the sharp end of manufacturing industry, possibly gained in the number 2 position of a larger electronics enterprise.

The salary, which is negotiable, will reflect the importance attached to the position, and the benefits package is all you would expect of a dynamic company.

In the first instance please write to the General Manager, Recruitment Services at IAL, Aeradio House, Hayes Road, Southall, Middx. UB2 5NJ. Please quote Ref. K011.



THE HIGH TECHNOLOGY TASK FORCE  
COMMUNICATIONS SYSTEMS  
COMPUTER SYSTEMS AND SERVICES  
MEDICAL SERVICES  
AVIATION SYSTEMS AND SERVICES-WORLDWIDE

## CHIEF ACCOUNTANT

c. £14,000 pa. NORTH WEST LONDON

Our Company, the Principal of a small Group, is well-established in providing Industrial Building Services. We need an experienced accountant to manage our busy Accounts Department. Responsible to the Group Financial Director and supervising eight staff, you will be responsible for: maintaining the main nominal ledger, bought ledger, cash book and sub-accounts; dealing with VAT and payroll queries; controlling petty cash; and also for maintaining the accounts of small ancillary companies.

We emphasise that relevant work experience, preferably in the Construction Industry, is most important. You will most likely be 28 plus, but age is no restriction. A knowledge of computerised accounting systems would be an advantage.

Please write enclosing an up-to-date C.V. to:  
Box A8430, Financial Times, 10 Cannon Street, London EC4P 4BY  
All correspondence will be treated in strictest confidence

## Young Chartered Accountants

S. East & Midlands To £15,000

As a result of continuing expansion our client, a major international Group, has identified the need at both the Head Office and Divisional Headquarters for several graduate Chartered Accountants, with above average potential, who are eager to make their first move into industry. The work, covering both management and financial accounting, will be both interesting and challenging. Successful completion of the initial appointment will open the door to career opportunities within the Group. Most of the positions require some experience in systems work and computers and one fluency in either French or German. Ref. 1294/FT. Write or telephone for an application form or send full details to R.P. Carpenter, FCA, FCMA, ACIS, 2-5 Old Bond Street, London W1X 3TB. Tel: 01-493 0156 (24 Hours).

Phillips & Carpenter  
Selection Consultants

## Newly Qualified

C. London c £11,750

Major international construction group seeks young ACA for central finance department to report on subsidiary companies. This position is seen as part of a career plan providing essential knowledge of the group before appointment to a key position in approximately two years time.

Contact  
Patrick Donnelly on 01-222 5169  
quoting ref. FT/9

tfi The Finance Index  
Financial Recruitment Consultants  
11, Palmer Street, London SW1H 0AB  
Tel: 01-222 5169/181

## Audit Seniors

£12,500+

Qualified seniors urgently required by medium-sized practice in EC2.

Excellent prospects.  
Telephone:  
PERSONNEL SERVICES  
01-263 1738

## Financial Controller/ Company Secretary

to £17,500 + Car

Byas Mosley, an expanding firm of International Lloyd's Brokers seek to appoint a Financial Controller/Company Secretary to be responsible for the financial control of the Group's activities.

The successful applicant will be a qualified accountant

under 42, familiar with Lloyd's procedures. This position will attract an individual seeking a rewarding challenge with excellent potential.

Please reply in confidence with full c.v. details to:  
Nigel Webb, marked personal.

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& Co. Ltd.  
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## QUALIFIED COMPANY ACCOUNTANT

preferably with post-graduate qualification, i.e. MBA or relevant business degree, required for a group of companies in West End.

Prime responsibilities will be to the company's financial director for the whole accounting function including preparation of monthly financial statement, half-yearly management accounts and annual statutory accounts.

It is intended to computerise the accounting function, therefore knowledge of computer systems will be an advantage. Salary will be negotiable.

Please send your c.v. (indicating current salary and daytime telephone number) to: Box A8445, Financial Times, 10 Cannon Street, London EC4P 4BY.

## GENERAL APPOINTMENTS

### Financial and Fiscal Administration Manager

This is a challenging appointment in one of the UK's leading international companies, manufacturing and marketing a wide range of quality food products.

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Starting salary will be well into 5 figures plus the normal benefits expected of a large company. King's Lynn has many attractions as a place to live and help will be given towards removal costs if necessary.

Please write, in confidence, with concise relevant details of career history and current earnings to: David Page,



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## Senior Housing Projects Development Manager

One of the world's largest manufacturers of system built wooden houses is looking for a senior project development manager for their activities in Southern England. The company will be located in the Hampshire area.

The person we are looking for should preferably be between 30-40 years old, a civil engineer, well established in the housing market, and have experience with the procurement of land for housing, project development and implementation of new housing projects.

The position will offer challenging possibilities for the right person.

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European consortium bank require an additional marketing man to concentrate on business multi-national and middle market accounts spread throughout the UK. Promoting a cross range of products, short/medium term finance, international trade finance, foreign exchange/money market, leasing and promoting advisory services. Contact Jon Dufayel.

UK MARKETING EXECUTIVE c. £18,000

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A well established European bank require a marketing executive to concentrate on the medium term finance sector, support finance, ECUED. Candidates should have sound credit writing and possess a relevant degree (economics). Challenging position for the ambitious. Contact Jon Dufayel.

FIB Recruitment (London) Limited  
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# International Appointments

## Finance Management Far Eastern Nationals

Singapore

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Our client, a progressive multinational oil field service group, is seeking to strengthen its regional management team in Singapore, covering both the Middle and Far East. Candidates, aged 27-33, will have an excellent business training, gained within an international environment. First class interpersonal skills, a positive commercial attitude and a high degree of mobility are essential.

The successful candidate will be able to contribute directly to the profitability of the operations and will be a member of the financial management team with specific responsibility for taxation and related matters.

The position offers an excellent remuneration package including the payment of full relocation expenses. Outstanding international career prospects exist within the group.

Interested applicants should contact Stephen Burke on London 831-0431 (Telex 296091), or send a detailed resumé to Michael Page International, Sicilian House, Sicilian Avenue, London WC1A 2QH.



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A well established company trading in building and construction materials has a requirement for a qualified Chief Accountant to join the management team and run the accounts department.

The position reports directly to the Financial Controller and is based at the Head Office in Dammam. Frequent travelling is necessary between the three centres of operation throughout the Kingdom.

The successful candidate will possess strong management qualities with a broad knowledge of all accounting activities; particular ability in the following areas would be a distinct advantage.

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A major national bank in one of the Gulf states seeks a senior credit officer to manage a department with a growing portfolio of domestic and international loans. Responsibilities will include a strong role in defining credit policy, portfolio management policy, developing credit administration procedures, supervising and training local credit staff, reviewing proposals submitted for approval and active participation in structuring complex credits.

A minimum of 10 years of credit related experience is necessary. The candidate will have a varied background with a major international bank including significant lending experience covering a variety of geographic and product areas. Education to a degree level with additional credit related professional training and course work is expected.

An attractive compensation package is negotiable. Some travel is necessary. Please write giving details of your career to date to:

WRITE BOX A8437, FINANCIAL TIMES,  
10 CANNON STREET, LONDON, EC4P 4BY

P7-6831

## Financial Controller

France

A successful UK owned European retailing group has a programme of planned acquisition which will take its sales this year to £80 million. Its headquarters are in France near Paris.

The business is seeking a Financial Controller whose prime responsibility will be the integration of group accounting and control systems across national boundaries. There will be opportunities to make significant contribution to corporate policy and operating success.

Candidates should be qualified accountants, probably in their mid 30's fluent in French, with a strong background in finance as well as controls and systems in a multi site retail company. Anyone earning less than £20,000 is unlikely to have the background to succeed in this demanding environment.

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MANAGEMENT SELECTION

The Royal Hong Kong Jockey Club



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The EDP Audit Manager administers around 24 full-time and 15 part-time staff who conduct operational and EDP audit reviews, and acts as deputy to the Audit Controller. Candidates aged 32 plus, must have at least 8 years programming and EDP auditing experience including exposure to real-time on-line systems in industry or commerce. Previous management experience and above-average technical skills are essential, and familiarity with the development of audit software is desirable. Further details will be supplied to short-listed candidates.

Salary is negotiable around HK\$270,000 p.a. plus substantial expatriate benefits and Club membership. End of service gratuity is around 25% of monthly earnings over the contract period. Current Hong Kong personal taxation is equivalent to 16.5%. In this instance, we shall be discussing the applications with our client before arranging preliminary interviews. Please write - in confidence - to Colin Bexon, ref. B17379.

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MANAGEMENT SELECTION

## Resident Auditor

BANKING - SINGAPORE

Our client is a leading Middle East bank with a substantial domestic and international branch network.

The Resident Auditor is required for the Bank's Singapore Branch. He, or she, will be functionally responsible to the Middle East based General Auditor for liaison with Head Office and external auditors and for carrying out a prescribed programme of checks and controls. There will also be a need for occasional travel to the Head Office and to other overseas branches.

An accounting qualification or a degree in economics or business administration is required and

candidates should have around four years' bank audit or operations experience, preferably with a local branch of a foreign bank. Familiarity with computer based accounting and reporting systems is essential, as is a thorough understanding of M.A.S. returns.

Salary is negotiable.

Interviews will be held in Singapore and London, and candidates are invited to send full career and personal details, including current salary, to A.R. Duncan at Bull, Holmes (Management) Limited, 45 Albemarle Street, London W1X 3FE, England, quoting Ref: 331.

**Bull Holmes**

PERSONNEL ADVISERS

E.P. SCHLUMBERGER

## Internal Audit/Budget Control

PARIS

Multinational Oilfield Service Company seeks a young (26-28) French-speaking graduate accountant (CA, ACMA, ACCA) with high potential for an international career starting in Paris.

The initial assignment will be newly created position, reporting to the Financial Controller, in a company designing end manufacturing high technology tools. Responsibilities would include internal audit of operational and financial procedures, plus budgetary control and monthly management reporting. Four years experience, including at least two in audit, are required.

Career prospects are good for an internationally mobile individual. Schlumberger offers a competitive salary and attractive benefits and relocation package. A Common Market passport would normally be required to work in France.

Please send a detailed Curriculum Vitae in confidence to: Etudes et Productions Schlumberger - 28, rue de la Cavée - 92140 CLAMART.

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## Senior Foreign Exchange Dealer-UAE

Substantial remuneration package

Our client, a major financial institution based in the UAE, has a vacancy for an experienced Senior Foreign Exchange Dealer.

The post requires around 5 years of experience in foreign exchange trading (spot, forward and swap) and in money market operations, with a reputable financial institution.

Preferred applicants will be aged around 30, with a university degree and/or Institute of Bankers Diploma and fluency in English and Arabic.

Remuneration includes a basic salary approaching \$60,000 plus free furnished accommodation and other major benefits.

Please write in confidence to MJB Ping, enclosing a detailed curriculum vitae, and quoting reference number F/104/P at:



Ernst & Whinney Management Consultants  
Becket House, 1 Lambeth Palace Road, London SE1 7EU.

## USA-Corporate Finance Director Designate

In order to fulfil their plans for expansion in the U.S.A. Heron International wish to fill this important new post for Heron Financial Corporation, the holding company for their U.S. activities.

The work will involve principally the negotiation and documentation of property transactions, financial/banking arrangements and commercial and corporate transactions, particularly acquisitions. The candidate should be fully experienced in these matters, preferably in a U.S. context, and must be able to deal with the complex and detailed legal, tax and accounting implications arising from the transactions envisaged.

The position will be most suitable for a candidate with a legal or accounting background either in a professional firm or in a large corporation or with merchant banking experience. It is unlikely that anyone with less than 10 years' relevant experience will have the ability to take on and succeed in this demanding position. Although the post will be based initially in London a considerable amount of travelling to the U.S.A. can be expected.

Salary, benefits and other terms are negotiable but will be amply rewarding for the right candidate and it is envisaged that a Board Appointment will be made at the end of 12 months.

Please write in the strictest confidence to Harry Dobin, Director

Heron International PLC

19 Marylebone Road, London NW1 5JL



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10, Cannon Street, London EC4P 4BY.

## CONTRACTS AND TENDERS

### REPUBLIQUE DU ZAIRE DEPARTMENT DES TRAVAUX PUBLICS ET DE L'AMENAGEMENT DU TERRITOIRE OFFICE DES ROUTES

Appel d'Offres no OR/SGMTP/006/CA/83.  
AVIS D'APPEL D'OFFRES INTERNATIONAL

La République du Zaïre a obtenu un prêt de l'International Développement Association en vue de financer partiellement le projet d'entretien routier de l'Office des Routes.

1. OBJET DE L'APPEL D'OFFRES  
L'Office des Routes met en adjudication en quatre lots le fourniture de filtres, de lames et coins de lames, de jets de bronze et d'acier et de pneumatiques nécessaires à la réalisation de son programme d'entretien routier.

2. ELIGIBILITE  
Les offres proposées devront obligatoirement provenir et être produites dans les Territoires des Etats participants ou pays membres de (IRA) et de la Suisse.

3. ACHAT DU DOSSIER  
Le dossier complet d'Appel d'Offres peut être obtenu:  
- auprès de la Direction Générale de l'Office des Routes, Boite Postale no 12,899 à Kinshasa 1 (Bâtiment situé ex-Avenue Descaups à Kinshasa - Gombe), contre paiement d'une somme de six Mille Zaires ou versement de la même somme au compte no 968.727.26 ouvert au nom de l'Office des Routes, Direction Générale, auprès de la Banque Commerciale Zairoise à Kinshasa.

- auprès de l'Union Mondiale ORT, 1-3, rue de Varembe 1211 Genève 20 (Suisse), par versement d'une somme de 200 Dollars ou sa contrepartie en Frs Suisse, au compte no 151.842/4 ouvert au nom de l'Union Mondiale ORT, auprès de la Société de Banque Suisse, 2 Rue de la Confédération, 1200 Genève, Suisse.  
- auprès de l'American ORT Fédération, 817 Broadway - 10003 New York - USA.  
- auprès de l'Union Mondiale ORT, ORT HOUSE, SUMPTER CLOSE, FINCHLEY ROAD, LONDON NW3 5HR, ENGLAND.

4. REMISE ET OUVERTURE DES OFFRES  
Les offres doivent parvenir sous pli fermé au Secrétariat Permanent du Conseil des Adjudications de l'Office des Routes, Boite Postale 10.899 à Kinshasa 1, avant le 15 Février 1984 à 10 heures, date et heure auxquelles il sera procédé en séance publique, à l'ouverture des offres.

5. LIEU DE LIVRAISON  
La livraison se fera au Centre SGMTP de l'Office des Routes à Kinshasa où se fera la réception de toutes ces matières.

OFFICE DES ROUTES  
DIRECTION GENERALE

SHAFALI BUSIKU J. BAUOIN  
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## TECHNOLOGY

PACIFIC LAUNCH FOR UNORTHODOX SPACE VENTURE

## Rubbish bin rocket set to fly

BY PETER MARSH

A CALIFORNIAN company called Starstruck plans to become a leader in commercial rocket launches—with technology borrowed from the rubbish dump.

The company will next month test its first rocket, which will use for propulsion a chemical reaction similar to the burning of rubber tyres.

The launch will take place not on dry land but from a spot in the Pacific 250 km off San Diego.

Starstruck, based in Redwood City, is backed by a group of Californian computer entrepreneurs.

By launching rockets at sea, the company finds it easier to comply with government safety regulations. People in built-up areas are unlikely to be threatened by accidents.

The firing is the result of three years of engineering effort by the 55-person company, formerly called Ace Technologies.

Mr Roy McDonald, the marketing director of Starstruck, insists that despite its unorthodox techniques, the company is deadly serious.

By the late 1980s, using bigger versions of its initial Dolphin rockets, the company plans to put into the geostationary orbit 36,000 km above the equator satellites for jobs such as communications.

At this stage, Starstruck would compete with more established launch vehicles such as Europe's Ariane rocket or the American space shuttle.

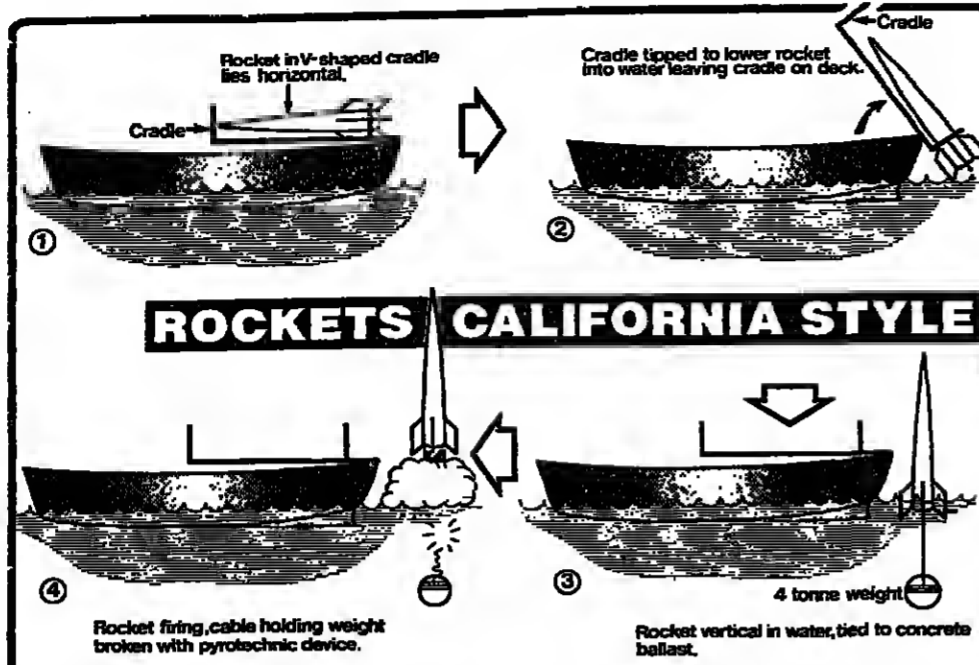
In a commercial operation, the ability to launch at sea would be invaluable, says Mr McDonald.

Engineers could simply tow their rocket to a place on the equator from which satellites receive an extra "kick" into space as a result of the angular momentum of the earth.

For its propulsion technology, the Californian space enthusiasts have taken ideas developed in the 1960s at United Technologies, an American aerospace company.

Liquid oxygen is spurted into a combustion chamber lined with a rubber compound—polybutadiene. A chemical called triethylaluminium is added to ignite the oxygen.

At this point, the rubber burns, producing a stream of hot gases. The gases, mainly carbon dioxide and water, spurt out of the rocket's exhaust to provide the vehicle's thrust.



A group of Californian space enthusiasts plans to take to the ocean in a new technique for launching rockets

According to Starstruck, this "hybrid" approach is safer than the conventional rocket technique in which fuel and oxidising agent are either both solids or both liquids.

The separation of the rubber compound from the liquid oxygen makes the combination less likely to explode accidentally.

"Our approach is more forgiving," says Mr McDonald. Launching rockets from water is also not new. In the early 1960s, the U.S. Navy experimented successfully with this technique.

STARSTRUCK WILL face early competition from the two U.S. companies that have just won approval for commercialising established launch vehicles operated by the Government.

The National Aeronautics and Space Administration has given permission to General Dynamics and Transpace Carriers to produce and sell the Atlas-Centaur and Delta

rockets. General Dynamics already makes the Atlas-Centaur, which can put a 2.4 tonne satellite into the geostationary orbit for \$44m. Transpace Carriers, a new company in Washington DC, will buy its rockets from McDonnell Douglas.

Satellite owners who "book" Delta will pay about \$30m for a launch of a 1.2 tonne space vehicle.

For the test flight, Starstruck will transport its rocket out to sea in a boat commanded by a former salmon fisherman.

The project, 17 metres long, will fit snugly inside a U-shaped cradle.

When ready for launch, the rocket will slide overboard so it is vertical. A four-tonne weight, a big piece of concrete, will keep the hardware upright until firing starts.

Waves and currents should not interfere with the rocket's take-off, says Starstruck. But any perturbations in the trajectory will be corrected by a guidance system built into the nose cone.

On the test, the vehicle will generate a thrust of some 20 tonnes and reach an altitude of only about 3 km. Hardware built into the nose cone and the engine itself will be parachuted back to the ocean for recovery.

The space entrepreneurs plan a total of six to 12 test flights in the first year. Later firings should boost the rocket into the fringes of space, to a height of 160 km.

Starstruck has already chosen a name—Constellation—for its satellite launch vehicle, which will use the same technology as the Dolphin but on a larger scale.

The company seeks to raise about \$10m over the next few years to further its plans. This is in addition to the "several million dollars" which Starstruck's backers have already put into the company.

Starstruck is not predicting when it will launch its first satellite. "I would like to give a date," says Mr McDonald. "But we have found that everything takes longer than you think."

## Competitors take off

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North Sea oil recovery project

## BP looks to innovative tanker for profits from small fields

BY ANDREW FISHER, SHIPPING CORRESPONDENT

A NEW term is about to gain currency in the complex world of offshore oil activities—SWOPS, or single well oil production system.

British Petroleum has asked world shipyards to tender for a specialised tanker, costing over £50m, as part of this project to draw oil from small, remote and previously uneconomic North Sea oilfields.

While the emphasis was on huge fields like Forties, Brent, or Ninian, the tiny oil accumulations of 10m barrels (recoverable) or so hardly merited attention. But BP reckons it is now worth going ahead with SWOPS, following informal UK government approval for development of one of the fields such as small oil accumulations it has in mind.

The tanker will take up most of the near £100m which BP estimates SWOPS will cost. Accounting for the rest of the money will be subsea wells and wellheads and the riser system of jointed tubes up which the oil will travel to the vessel through a hole or "moonpool" in the hull's centre.

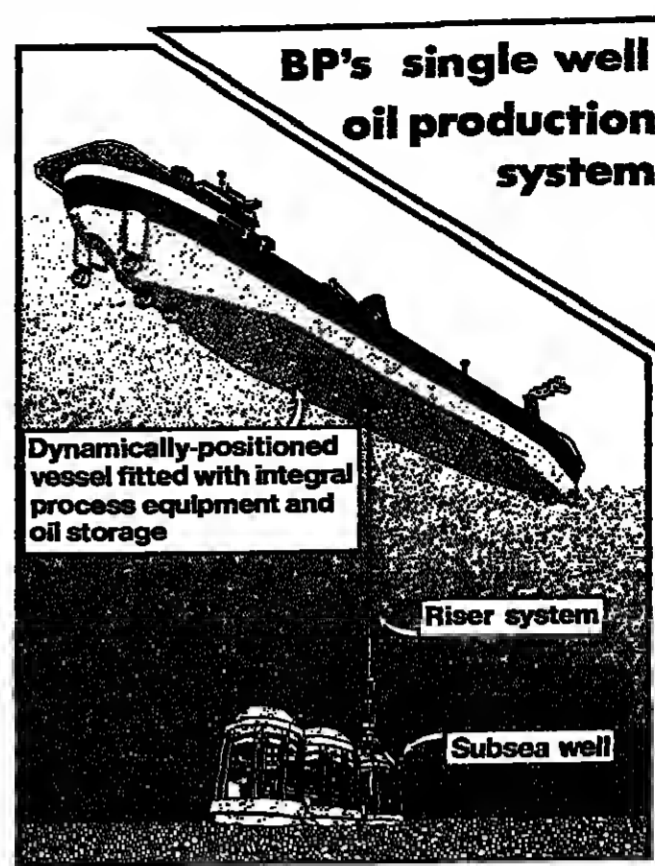
Although the ship, on which VO Offshore (part of British Shipbuilders) has done key design work, will be tailored for BP locations in the North Sea, SWOPS is considered suitable for most world offshore oil sites where minor fields can be found away from large ones.

BP expects other companies to develop similar schemes later. Its own ship will be fully occupied for 20 years in bringing oil from the three small North Sea fields, where it will be the sole operator or in partnership with others.

The minimum depth of operation will be 250 feet. At occupied for 20 years in bringing oil from the three small North Sea fields, where it will be the sole operator or in partnership with others.

These wellheads—one in each field from which two wells will be drilled—will be installed ahead of the ship's arrival. Once the tanker has left its base, probably Rotterdam, it will be able to spend several weeks at sea taking up the oil from the wells.

The technology advances in SWOPS will mainly be in the connection of the riser system to the wellhead. This will take about an hour, with the riser



Artist's impression of SWOPS in action.

virtually snapping on—mechanically, not magnetically—to the wellhead.

No support craft will be needed, though a remotely-controlled vessel, or "submerged eyeball," will be operated from the tanker for an underwater view. There will also be a TV camera in the riser tube.

The ship will have computer-controlled dynamic positioning equipment, as semi-submersible rigs now have, to keep it in place on the sea's surface. Once the riser system has been lowered to within two feet of the wellhead, it will drop on by its weight and the connection will then be pulled tight.

Initially, the SWOPS method should enable at least 10,000 barrels a day to be produced from one of the fields, falling after five years or so to much more than 3,000 b/d as

the water content increases. The ship will have process plant on board to separate out the gas, after the crude oil has come through the riser system.

BP should receive the ship late in 1988 or early in 1987. As well as UK yards, a number in Scandinavia, northern Europe and the Far East are in the running. The group would like to build in Britain, possibly at Cammell Laird on Merseyside, but much will depend on the financial packages offered by contending yards.

It is the financial advantages on which BP aims to capitalise in the North Sea application of SWOPS. For small oilfields, Petroleum Revenue Tax does not apply. The capital cost for each barrel of oil extracted by the SWOPS method will be high. It will be the combination of UK fiscal benefits and favourable financing of the vessel that will make the scheme economical for BP.

Probably the most important and possibly the least controversial recommendation of the Green Paper aims at separating the Patent Office from the Department of Trade and Industry and establishing it as a self-financing statutory body. This would enable the office to retain the experts it has trained—now often whisked away by the Civil Service appointments rota—and to budget its own investments into the information business.

How far-reaching the improvement would be, and how quickly it could be achieved would depend on the ability of the Patent Office's management to change the "culture" of the institution. Experience shows that even fairly ruthless dictatorial regimes can do little more, on assuming power, than to install small operational units in government departments and do without the assistance of the established civil servants.

To change the working habits and relationships of an office can be achieved only by replacing all the employees or by a patient process of re-education, taking many years.

• *Continued on page 29, 24.88.*

## BUSINESS LAW

## An optimistic view of the British patent system

By A. H. HERMANN, Legal Correspondent

IF NOTHING else helps, there is always the well-tried magic method of overcoming obstacles by denying their existence. Dr Robin Nicholson, the chief scientific adviser to the Cabinet, may find it more difficult to silence the chorus of protest from patent agents and lawyers which his report on Intellectual Property Rights and Innovation is likely to provoke, than Lord Nelson when he silenced his officers after the battleship La Revolution joined the

French fleet at Trafalgar. But some of the Nicholson recommendations may yet survive if the Prime Minister turns her deaf ear to the protests.

On reading the Green Paper presented to Parliament by the Prime Minister in the last days before Christmas, one cannot help feeling elated by the unusual experience of finding the user's point of view, and not that of the professionals and practitioners of the patent system, actually exposed in a

Government paper. What a pity that voice was not given greater weight before the adoption of the 1977 Patent Act which, in most things, runs contrary to Dr Nicholson's recommendations. However, the paper does not aim at a complete picture of the obstacles to innovation.

There is an inherent contradiction in the patent system which grants a temporary monopoly to the inventor in exchange for disclosure. That, in practice, facilitates imitation and undermines the protection. The intellectual property protection is eroded by the EEC, which gives higher priority to competition rules and free movement of goods. And the new countries' policy of "technological decolonisation under duress"—that is, by sequestration of patents and trademarks, has the blessing of the EEC Commission which in 1982 agreed to a revision of the Paris Patent Convention, one must assume with the knowledge, if not tacit agreement, of the Foreign Office.

Innovation is threatened not only by the contradictions and weaknesses of the patent system, but also by product

liability programmes and, increasingly, by the free exploitation by imitators of technical and health safety tests carried out by the innovator in a wide range of products from building materials to medicines. These matters were not considered by Dr Nicholson, who was asked to study only whether the national system of intellectual property rights was well suited to encouraging innovation.

The 1977 Patent Act, by putting forward the publication of the patent application, and by introducing stricter standards of examination, shifted the balance of the British patent system to the advantage of big companies. These are more interested in information that can be gleaned from the patent libraries than in a quick grant of the patent, indispensable to an individual inventor or small firm in need of finance and backing for the commercialisation of their invention.

Dr Nicholson's recommendation that the system should be supplemented by a "petty patent" issued quickly and without examination, would

help the small companies if such a patent were accepted as a basis for overdraft by a friendly bank manager. The bank manager may fear, however, that his customer may not have the means, financial and managerial, to bring an infringement action in defence of a full patent, and even less of one which has not yet been examined by the Patent Office.

The concept of the petty patent and postponement of examination until such time as the invention has proved to be commercially viable, or until there is need to defend it, have been put into practice in many countries. Some experts go as far as to maintain that the best protection is publication of the invention in a little known language, in a periodical of small circulation, which would suffice to disprove the novelty of any future patent applications by competitors.

The next logical step would be to replace the patent system by a form of copyright protection, but this excellent idea is quite unacceptable to the powerful interests vested in the present patent system and, therefore, hardly worth considering.

The proportion of patent

applications lodged by small or medium-sized firms has steadily diminished over the past decades in most countries. But the UK's experience has shown that, although more research establishments are associated with big companies, small firms more often produce radically new ideas.

Small firms may be deterred by the high cost of obtaining a patent, and the even higher and mostly quite prohibitive cost of defending it in courts. Dr Nicholson's recommendation that the defence of patents should be, partly on the U.S. model, removed from the adversary proceedings of the Patent Office, would be a real help to individual inventors and firms which do not have unlimited means. So, in all probability, would be the proposed removal of the patent agents' monopoly.

The big league would be more than compensated by Dr Nicholson's recommendations, which would turn the Patent Office into a technical library actively marketing the information available on its files. This would, no doubt, help research and development laboratories,

but not only in this country. Patent libraries are already linked by a European databank which, however, is not of much use if it is difficult to find the information required for a particular project.

The Patent Office has recently made this even harder by giving up its subject classification, enabling searchers easily to detect patents improving certain products or processes, and concentrating on classification by innovative steps. The Office was forced to do this by the need to facilitate investigations which may no longer be limited to patents granted only in the past 50 years in the UK and by a shortage of clerical staff.

A corollary to greater accessibility and marketing of patent information should, probably, be the possibility of keeping certain key patents secret, such as those important for defence, although even here secrets cannot be avoided. Thus, British patents for the VX nerve gas are available in foreign libraries and, similarly, the defusing of German bombs during the last war was greatly assisted by the availability of German patents in the Patent Office in London.

Probably the most important and possibly the least controversial recommendation of the Green Paper aims at separating the Patent Office from the Department of Trade and Industry and establishing it as a self-financing statutory body. This would enable the office to retain the experts it has trained—now often whisked away by the Civil Service appointments rota—and to budget its own investments into the information business.

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• *Continued on page 29, 24.88.*

## Contract Research &amp; Development-Contact IRD

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Telephones

## Wide area call logging

ORGANISATIONS WITH private exchanges at more than one location might be interested in a call logging system from Business Telecommunications that allows accumulated data at the various sites to be sent to the central location automatically for computer compilation of a consolidated report.

At each site all the FAX lines are monitored to record the called and calling number, the length of the call, its cost and similar data. Conversations themselves are not recorded, more accurately and keep a check on 'phone company bills.

The system, based on the company's ETS 123 logger, can work with any type of FAX at the sites and can reduce the cost of call logging by eliminating the need for a logging processor at each location.

Instead, a single central computer automatically polls solid state storage devices at each site, over either private tie lines or the public switched network or both.

As networks expand ETS' software can be added for as little as £2,500 per location. More on 01-657 8855.

Computing

## Micro link

A COMMUNICATIONS controller from Norsk Data, the Norwegian minicomputer manufacturer, is one answer to the problem of linking a mainframe to a microcomputer.

A stand alone device with four megabytes of MOS memory and a 16-bit processor, it costs a basic £16,250 including 45 megabytes of hard disc memory. More on the ND-100CC from Norsk on 0635 35544.

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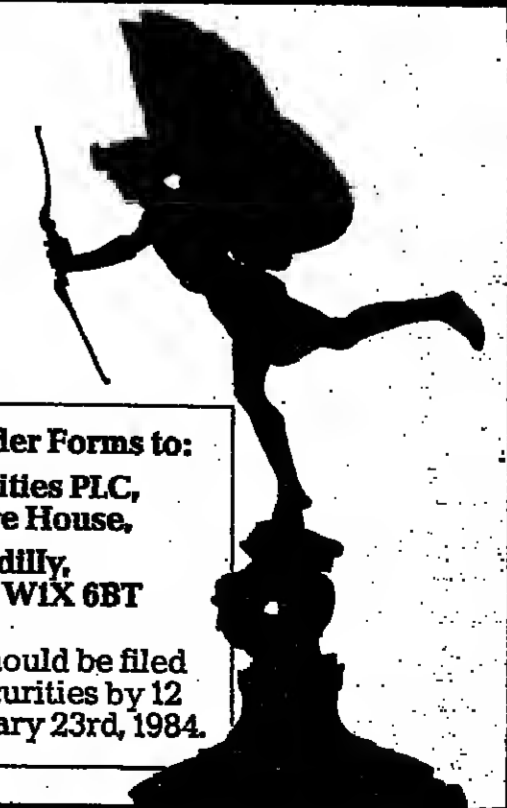
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All Tenders should be filed with Land Securities by 12 Noon on February 23rd, 1984.



SECTION III - INTERNATIONAL MARKETS FINANCIAL TIMES

Thursday January 12 1984

NEW YORK STOCK EXCHANGE 30-32 AMERICAN STOCK EXCHANGE 31-32 WORLD STOCK MARKETS 32 LONDON STOCK EXCHANGE 33-35 UNIT TRUSTS 36-37 COMMODITIES 38 CURRENCIES 39 INTERNATIONAL CAPITAL MARKETS 40

WALL STREET

Fuel for advance is elusive

A MORE subdued trading session emerged on Wall Street yesterday as investors continued to ponder the prospects for an improvement in the bond market which is thought necessary to fuel a further advance in stocks...

In the stock market, the lack of a lead from the credit sector, brought lower prices at the opening, but there was little attempt to extend the selling bout seen at the close of the previous session...

The underlying tone remained confident, with investors poised to respond to any easing in bond yields.

Still fresh from its successful capture of the Getty Oil reserves, Texaco topped the active list, after a block of 1m shares changed hands at \$38, a shade above the market level of \$37 1/2 which was a net 5 1/2 up.

Others to attract block trade business included Bristol-Myers, Tandy, International, Warner-Lambert and Prime Computer.

Another bout of selling developed in Baxter Travenol, the pharmaceuticals group, which dipped 1 1/2 to \$22 1/2. The stock has been out of favour since bearish comment from brokerage analysts brought sellers out some weeks ago.

General Motors at \$78 1/2 was little changed after confirmation of boardroom plans to reshape the car manufacturing and marketing operations into small car and big car units.

IBM at \$122 1/2, although up 5/8, remained an unexciting spot in the high technology markets, Texas Instruments shaded 5/8 lower to \$139 1/2 while among the personal computer makers, Coleco regained 3/4 to \$20 1/4 as investors digested the latest reports on sales of its Adam computer.

National Semiconductor continued to benefit from the group's settlement of

the suit brought by IBM and at \$18 1/2 gained 5/8 on turnover exceeding 1/2m shares.

Oil shares remained active, but profits were taken in some of the issues firmer this week in the wake of the Texaco-Getty deal. Gulf Oil gave up \$1 to \$47 1/4. Exxon and Atlantic Richfield, both depressed this week by doubts over world oil prices, rallied. Exxon added 3/4 to \$37 1/2 and Arco 5/8 to \$41 1/4.

Johnson and Johnson, the retail drug group, lacked buyers and shaded lower by 3/4 to \$40 1/4.

On the American Stock Exchange, where the index also showed a fall, weakness was shown in some technology issues as profits were taken. Wang Laboratories at \$38 1/2 shed 3/4 while AMDahl lost 3/4 to \$19 1/2. Petro Lewis, the operator of oil exploration franchises, moved up to \$12 1/2, however, and among Canadian stocks, there was support for Dome Petroleum, 3/4 higher at \$3 1/4.

Credit markets showed a general lack of retail business. Short-dated issues were little changed from overnight, with three-month Treasury bills at a discount of 8.93 per cent and the six-month at 9.06 per cent.

Towards the longer end, prices were inclined to ease back in thin turnover. The key 2013 long bond at 10 1/2% lost 1/4 to yield 11.82 per cent.

LONDON

Retreat sets in amid rate jitters

THE THREAT of higher interest rates following December's money supply figures depressed gilt-edged securities and brought leading London equities down to earth yesterday.

With lower early bond values in the U.S., selected high-coupon gilts ended down 1 1/2 points. The shorts closed with losses extending to 1/2.

Fairly heavy profit-taking developed in popular blue chip shares. Jobbers were reluctant to take stock on their books so near to tomorrow's close of the current trading account.

The FT Industrial Ordinary index closed 5 1/2 down at 790.0. Distillers, which has shown particular strength lately on takeover rumours, shed 7p to 225p, while ICI closed 12p lower at 636p.

Details Page 33; Share information service, Pages 34-35

TOKYO

Return to a mood for records

RENEWED BUYING of bank equities took the Nikkei-Dow market average to another high in Tokyo yesterday, with investors also selecting high-priced issues after adopting a hands-off attitude in the morning, writes Shigeo Nishitani of Jiji Press.

The Nikkei-Dow index climbed 56.30 points from the previous day to close at 10,072.51, eclipsing the previous high of 10,053.71, reached on Monday. Turnover increased to 491.73m shares from Tuesday's 425.46m. Advances outpaced declines 383 to 380, with 138 issues unchanged.

Reflecting persistent investor concern over the rapid upsurge in share prices, Kokusai Denshin Denwa (KDD), Japan's international telecommunications monopoly, and other high-priced speculative issues were selected in early trading.

KDD shot up Y500 at one stage and ended at Y16,780, up Y190. Nippon Television Network posted a maximum allowable rise of Y1,000 to Y9,000, while Toho, an important film company, climbed Y490 to Y7,990. The sharp rises of those issues reflect investor expectations of stock splits.

Famuc advanced Y340 to Y10,650, Kyocera Y100 to Y9,610, and Japan Air Lines Y260 to Y3,450. Also firm were pharmaceuticals, with Dai-nippon Pharmaceutical rising Y170 to Y3,370 and Kaken Pharmaceutical Y270 to Y1,670.

In the afternoon session, banks gained ground on renewed buying, as they will soon issue new stocks priced at par. Fuji Bank firmed Y65 to Y845, Sumitomo Bank Y40 to Y670, Mitsubishi Bank Y37 to Y610, Sanwa Bank Y40 to Y600 and Tokai Bank Y20 to Y510.

In issues sensitive to commodity market fluctuations, some textiles and foods attracted buyer attention, with Asahi Chemical Industry rising Y18 to Y468 and Takara Shuzo Y28 to Y488. Blue-chip stocks remained out of

investor favour. NEC dropped Y10 to Y1,480, Fujitsu Y10 to Y1,290 and Matsushita Electric Industrial Y10 to Y1,930. But Canon gained Y40 to Y1,550 and Honda Motor Y20 to Y1,110.

Meanwhile, the downtrend of bond prices, which had persisted since the turn of the year, tapered off, with few small-lot selling offers made by smaller securities houses.

The yield on the benchmark 7.5 per cent government bonds, due in January 1993, climbed to 7.535 per cent at one stage from the previous day's 7.52 per cent, but closed lower at 7.515 per cent.

The bond market firmed from late last October to December, with the yield plunging to 7.35 per cent from 7.75 per cent, but has weakened this year. Leading brokers believe it only natural that the market should now begin a spontaneous rally.

EUROPE

Enthusiasm all but evaporates

MAJOR European centres continued their process of consolidation yesterday and most of the big markets experienced a lack of trading enthusiasm because of nervousness about the dollar's fluctuations.

Bourses in West Germany, Switzerland and the Netherlands registered lower prices and a small rise in Belgium was prompted only by buoyancy in oil stocks and non-ferrous metals.

Fears that West German interest rates might be forced up by the need to defend the D-Mark, coupled with the wide fluctuations of the dollar, prompted a nervous trading session in Frankfurt.

Shares closed mixed and the Commerzbank index slipped another 0.5 to 1,049.5 after its 15.4 tumble the previous day.

Car manufacturers saw some of the largest falls. Daimler dropped DM 5 to DM 822, VW eased DM 3 to DM 225.50 and BMW was down DM 3 to DM 424.

Erratic dollar trading also influenced bond prices with gains of up to 30 basis points and losses of as much as 40 basis points. The Bundesbank sold DM 34m of paper.

Uncertainty over the dollar and U.S. interest rates were also factors influencing trading in Zurich, where prices closed lower although several issues were recovering towards the end of the session.

Some profit-taking was registered in banks and financials.

Bonds closed narrowly mixed with the previous day's news of lower inflation in 1983 failing to encourage investors.

The Amsterdam market continued to correct and prices fell across the board. The APN-CBS index shed 2.4 to 161.9.

While most losses were moderate, few issues managed to avoid the trend. Publisher VNU dropped Ft 2.70 to Ft 153.30 despite an announcement that profits for 1983 would be considerably higher than earlier expected.

Insurer Amfias, which announced the previous day it would reduce its workforce by about 30 per cent, fell Ft 10 to Ft 160.

Bond prices were flat to slightly lower in sluggish trading following disappointing terms for a new state issue.

Moderate trading in Brussels took the Belgian Stock Exchange index to another 10-year high with a 0.36 rise to 139.62.

But apart from the strength of oil stocks and non-ferrous metals, the tone was mixed to depressed. Market leader Petrofina was up BFr 170 to BFr 8,440.

Bourse operators noted some profit-taking in Belgian shares following the lower trend on Wall Street.

Meanwhile, the Banque Nationale de Belgique announced it had spent the equivalent of BFr 6.3bn in the week ending January 9 to offset the rise in the dollar.

Paris finished mixed in moderately active trading dominated by profit-taking.

Interest centered on motor shares after state-owned Renault announced it had a record year in 1983 due mainly to foreign sales, and Peugeot's Talbot plant at Poissy restarted production. Peugeot dipped FFr 1 to FFr 227.

Stockholm closed slightly higher in moderate trading; Madrid was led upward by bank issues; and in Milan prices rose across the board in a market spurred by a surge of buying interest in Fiat stock.

In Copenhagen, shares which were at a peak on Tuesday fell back sharply at the failure of Mr Poul Schluter, Prime Minister, to secure a firm parliamentary majority for his coalition government in the general election.

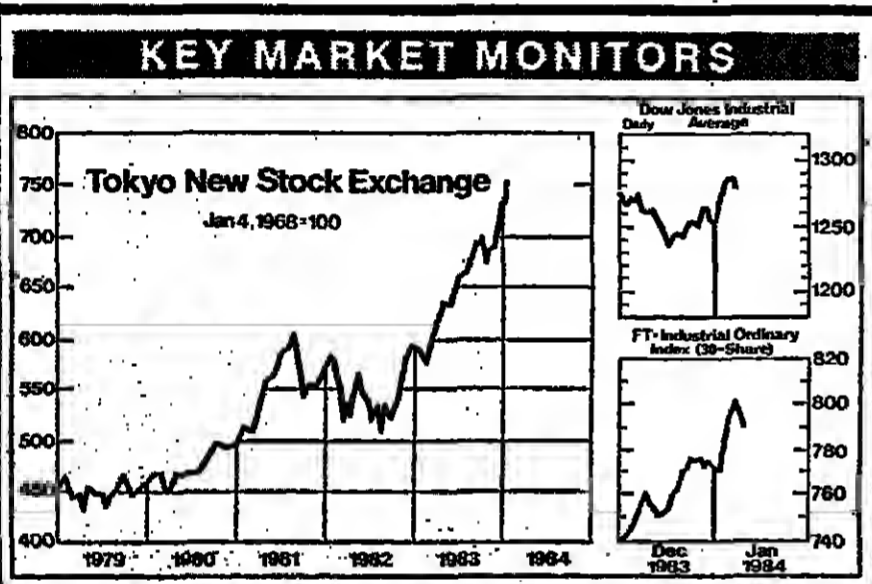


Table with columns for Stock Market Indices (New York, London, Tokyo, Australia, Austria, Belgium, Canada, Denmark, France, West Germany, Hong Kong, Italy, Netherlands, Norway, Singapore, South Africa, Spain, Sweden, Switzerland) and Currencies (U.S. Dollar, Sterling, Euro-currencies, Interest Rates, U.S. Bonds, Financial Futures, Commodities).

Table with columns for U.S. Dollar, Sterling, Euro-currencies, Interest Rates, U.S. Bonds, Financial Futures, Commodities.

HONG KONG ENCOURAGEMENT was taken in Hong Kong from Chinese comment on the future of the colony and prices closed higher in very heavy turnover. The Hang Seng index ended at its highest close since August 31; up 21.13 to 964.47. Hutchison Whampoa added 60 cents to HK\$16.40 and Jardine Matheson 40 cents to HK\$13.50 while Swire Properties and Swire Pacific "A" both gained 20 cents to HK\$5.40 and HK\$18.40 respectively. Year of Pig has spring in tail, Page 32

SINGAPORE SPECULATIVE buying alternated with profit taking in Singapore where shares closed narrowly mixed. The Straits Times Industrial index slipped 0.15 points to 1,037.08. There was an easier undertone, attributed to a technical correction following what some see as the overbought position of the market.

TAIWAN STATISTICS showing that Taiwan's exports grew 13.1 per cent last year provided the impetus to take the stock exchange's weighted index up 8.80 to a record 783.47, compared with Monday's previous peak of 780.18. A series of advances in the last week - which were halted by a bout of selling on Tuesday - are attributed to export growth and continued confidence in an economic recovery.

AUSTRALIA IN MODERATE trading, Sydney turned mixed to weaker as the market consolidated after record-breaking gains in the past few weeks. Industrial issues were steady while mining and resource stocks were sold; Overnight trading formed much of the day's volume, brokers said

The FT-Plan advertisement featuring a silhouette of a person and text: 'We are what we digest. Medical opinion has never been more didactic about the importance of a balanced diet. Your daily FT diet. Fortunately these problems can be overcome very simply. A daily diet of the Financial Times provides all the information and comment your brain needs to keep it active and healthy. It will keep you alert, bright-eyed, on your toes, ready to deal with every eventuality. Today and every day. Remember, we are what we read. Give your brain the exercise it needs. Take the FT every day, and maintain a healthy mind in a healthy body. No FT-Plan...no comment.'



AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Table of American Stock Exchange Composite Closing Prices, listing various stocks with columns for 12 Month High/Low, Stock Name, Dividend Yield, P/E Ratio, and Price.

Continued on Page 32

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Table of New York Stock Exchange Composite Closing Prices, listing various stocks with columns for 12 Month High/Low, Stock Name, Dividend Yield, P/E Ratio, and Price.

Continued on Page 32

Notes and footnotes regarding the data, including a disclaimer: 'Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. When a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.'

WORLD STOCK MARKETS

HONG KONG Year of Pig has spring in tail

AS THE Chinese lunar Year of the Pig draws to a close, Hong Kong stockbrokers are discovering an upward curl in its tail. Since January 3, when local stock markets reopened for business, the Hang Seng index has risen by almost 11 per cent, to close yesterday's half-day session up 21.13 at 964.47, writes Robert Cottrell in Hong Kong.

It is not yet, by Hong Kong's volatile stock market standards, a major rally. And unlike other world markets, Hong Kong is not hitting new all-time highs. The Hang Seng index has been wallowing in the 800-1000 band for the last year and is recovering now to levels which it last saw in August to September 1983.

But local analysts are particularly heartened by the high volume of business being seen this week - a sign that both local and overseas investors are returning to the market, and that buying interest is sufficiently strong to absorb intermittent selling pressure from local investors, keen to take profits.

In the dog days of 1982-83, a combined daily turnover of HK\$100m or less on Hong Kong's four stock exchanges was commonplace. On Monday of this week, by contrast, turnover topped HK\$350m; on Tuesday HK\$287m; and yesterday, a half-day session, an exceptionally busy HK\$286m.

Analysis points to a range of factors - political, economic and speculative - now moving the Hong Kong market. On the political front, China is clarifying further its plans for the colony's future after Britain's leave over most of the territory expires in 1997. While there is ample room for scepticism, some investors seem inclined for the time being to see relatively hopeful signs.

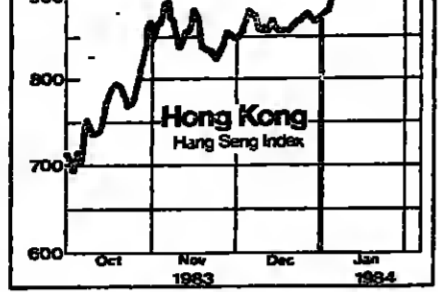
Much of yesterday's excitement on the stock market was attributable to a speech given on Tuesday evening by Xu Jiatun, Peking's senior representative in

Hong Kong, in which Xu reiterated that Hong Kong's capitalist system would be preserved - under Chinese sovereignty - for 50 years after 1997.

The next significant date on the political calendar is January 25, when Britain and China begin another two-day round of talks in Peking about Hong Kong's future. Some previous talks were marked by uncompromising Chinese statements which hit Hong Kong confidence hard.

It appears now, however, that the talks are going relatively smoothly, and that the two participating governments recognise the importance to Hong Kong of projecting an image of progress.

As the Hongkong and Shanghai Banking Corporation notes in the January 1984 number of its Economic Report, published yesterday, Hong Kong's domestic exports in the first 11 months of 1983 showed 25 per cent growth in value terms over the comparable period of 1982. For November 1983 alone, the value of domestic exports was 45 per cent higher year-on-year.



Economically, the "pegging" of the Hong Kong dollar to the U.S. dollar since October has eased equity investors' exchange risk fears, and freed their minds to concentrate on Hong Kong's remarkable export performance through 1983.

As the Hongkong and Shanghai Banking Corporation notes in the January 1984 number of its Economic Report, published yesterday, Hong Kong's domestic exports in the first 11 months of 1983 showed 25 per cent growth in value terms over the comparable period of 1982. For November 1983 alone, the value of domestic exports was 45 per cent higher year-on-year.

The strong export performance means that the Government's target of 5 1/2 to 6 per cent real growth in gross domestic product for 1983 should have been achieved. The bank feels that the territory's economic performance in 1984 will be stronger still.

A typical beneficiary of the export re- is the publicly quoted Wincor In-

dustrial, Hong Kong's largest textile and garment group, which announced last month that it would be increasing its interim dividend for the first time in four years, on the back of near-doubled interim profits.

Other beneficiaries are in the export-oriented electronics sector, where companies including Lambda, Wong's Industrial and Evergo, went public during 1983 with share issues of which all were heavily oversubscribed.

Other factors currently boosting market sentiment include speculation that a major tract of government-owned land - the "Admiralty Two" site - may prove attractive to buyers when it goes up for sale next month. The Government has indicated that it wants at least HK\$300m for the site.

If Admiralty Two manages to command a significantly higher price, investors may be reassured that Hong Kong's collapsed property market has at least bottomed out, if not yet started to recover.

Stockbrokers are also enthusiastic about the flotation of HK-TVB, the larger of Hong Kong's two television companies, whose shareholders are seeking to raise HK\$280m by selling one-quarter of HK-TVB's equity to the public. Indications are that the offer, which closes today, may be 10 times oversubscribed, reflecting the volume of funds which could flow into other equities if investors' confidence strengthens.

For the immediate future, analysts are wondering whether the Hang Seng index will now break through the 1,000 level, and if so, whether such a move will trigger a round of profit-taking. At current levels, the stock market is still cheap in world terms - a prospective earnings multiple of around nine times, a yield of some six per cent.

The factor which denies Hong Kong straightforward comparison with other markets is the overhang of political uncertainty, which will not be wholly dispelled until the territory finally reverts to Chinese sovereignty and China's stated intention of permitting capitalism and autonomous government for Hong Kong can be seen translated into practice.

But even the most patient of investors might consider 13 years too long a time to adopt a "wait and see" approach. This week's buyers evidently see money to be made in the meantime.

CANADA

Table of Canadian stock prices including ANAC Int'l, Abitibi, Alcan, and others.

DENMARK

Table of Danish stock prices including Aarhus A/B, Andelsbanken, and others.

FRANCE

Table of French stock prices including Air France, Bouygues, and others.

GERMANY

Table of German stock prices including AEG Telefunken, BASF, and others.

AUSTRIA

Table of Austrian stock prices including Creditanstalt, Gessner, and others.

BELGIUM/LUXEMBOURG

Table of Belgian/Luxembourg stock prices including ARBED, Banque Paribas, and others.

ITALY

Table of Italian stock prices including Banca Com. It., BNL, and others.

NETHERLANDS

Table of Dutch stock prices including ADF Holding, Alkermat, and others.

NORWAY

Table of Norwegian stock prices including Bergens Bank, Borgestad, and others.

SPAIN

Table of Spanish stock prices including Banco Bilbao, Banco Central, and others.

SWEDEN

Table of Swedish stock prices including Alfa, ASEA, and others.

SWITZERLAND

Table of Swiss stock prices including Alusuisse, BSN, and others.

AUSTRALIA

Table of Australian stock prices including ANZ Group, BHP, and others.

JAPAN (continued)

Table of Japanese stock prices including Dai-ichi Kangyo Bank, Daiwa Bank, and others.

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INDICES

Table of stock indices including New York Dow Jones, Standard and Poors, and others.

NEW YORK

Table of New York stock prices including Dow Jones, S&P 500, and others.

STANDARD AND POORS

Table of Standard and Poors stock prices including Industrial, Domestic, and others.

H.Y.S.E. ALL COMMON

Table of H.Y.S.E. All Common stock prices including Industrial, Domestic, and others.

MONTREAL

Table of Montreal stock prices including Industrial, Domestic, and others.

TORONTO

Table of Toronto stock prices including Industrial, Domestic, and others.

WORLD

Table of world stock prices including Canada, France, Germany, and others.

Exchange cross rates

Table of exchange cross rates including Pound Sterling, U.S. Dollar, and others.

AMERICAN STOCK EXCHANGE CLOSING PRICES

Table of American stock exchange closing prices including Dow Jones, S&P 500, and various individual stocks.

NEW YORK CLOSING PRICES

Table of New York closing prices including various commodities and currencies.

FINANCIAL TIMES

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For information contact: G. T. Damer, Financial Times, Guillolettstrasse 54, 6000 Frankfurt am Main, W. Germany. Tel: 0611/75980, Telex: 416 193. or Laurence Allen, Financial Times, 75 Rockefeller Plaza, New York, N.Y. 10019. Tel: (212) 489 8300, Telex: 238 409 FTOL UI

New York closing indices were not available for this edition because of technical problems.

Exchange cross rates every day in the Financial Times

Table of exchange cross rates including Pound Sterling, U.S. Dollar, Deutsche Mark, Japanese Yen, and others.



MARKET REPORT

RECENT ISSUES

Threat of dearer credit leaves Gilts down 1 1/2 and equity index 6.8 lower at 790.0

Account Dealing Dates
Option
\*First Declared Last Account
Dealings tions Dealings Day

The threat of dearer credit following December's banking statistics and suggestions that UK interest rates now looked set to move higher rather than lower, thoroughly depressed gilt-edged securities and brought leading equities down to earth on the London Stock Exchange yesterday.

Burdened also by the continuing weakness of sterling against the dollar, the pound was again uneasy in foreign exchange markets yesterday. Government stocks were particularly concerned over the sudden bounce in the money supply aggregates.

Sentiment was additionally affected by the Nationwide Building Society chief's comment that there remains little prospect of an early cut in mortgage rates. Longer-dated gilts opened with falls of 1 1/2 but the losses were quickly extended to a point.

Lower early values there caused a resumption of selling which left selected high-coupon Gilts down 1 1/2 points at the worst levels of the day. The shorts were not affected to the same degree as last year, to close 0.70 down at 82.95.

Leading shares soon trailed in the wake of gilts. Realisations that higher interest rates would militate against the New Year plethora of bullish equity market predictions touched off fairly heavy profit-taking in popular blue chip shares. Values continued to decline as sellers became more active and jobbers reluctant to take stock on their books so near to tomorrow's close of the current trading account.

The FT Industrial Ordinary share index was 5.4 down at 10 am and two hours later had almost doubled the fall to 10.5. This proved to be the worst of the day and after-hour prices were raised slightly in this trading. The result was that the index closed 6.8 down on balance at 790.0.

Distillers, which has shown particular strength lately on takeover rumours, reacted 7 to 25p, while ICI closed 12 lower at 636p.

Phoenix jump

Phoenix stock out strongly in insurance market today as speculative buying fuelled by suggestions that Allianz will carry out its intentions to the group following the recent unsuccessful attempt to acquire Eagle Star.

FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

Table with columns: EQUITY GROUPS & SUB-SECTIONS, Wed Jan 11 1984, Index, % Change, etc.

FIXED INTEREST

Table with columns: PRICE INDICES, Wed Jan 11, Day's change, etc.

the past as being a possible bid candidate, gained 8 to 48p. Clearing banks went lower with the general trend. Lloyds the retreat at 83p, down 7, while Barclays slipped 5 to 495p.

Most major Building issues ended the session relatively unscathed, but boushielders Barratt Developments were vulnerable to higher interest rates and shed 6 to 180p. Magnet and Southern were another casualty, falling 10 to 150p following interim profits below best expectations.

Long-term speculative favourite in the market was the 5.1 per cent holding, in Stylo and dipped to 31p before settling a net 4 off at 81p; Stylo fell 7 more to 255p.

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Stores quietly dull

Leading Stores drifted lower after the afternoon session as higher interest rates could affect recently-buoyant consumer spending. Dealers reported only modest selling, however, and falls were generally restricted to a few pence. Raybeck, a firm market of late ahead of the forthcoming interim statement, reacted 3 to 37p following announcement of next Tuesday's disposal of its Davies and Field subsidiary and purchase of ladies fashion garment manufacturer Alfred Young.

Bowater down

Bowater encountered early selling pressure and touched 35p before settling a few pence above the day's worst at 26p, down 8. Interest in other Miscellaneous Industrials was at a low ebb and quotations drifted lower mainly on the withdrawal of recent support.

Quiet mines

A much quieter day in mining markets saw South African Golds close with modest gains for the second successive day despite a relatively unimpressive performance by the bullion price. The

FINANCIAL TIMES STOCK INDICES

Table with columns: Jan 11, Jan 10, Jan 9, Jan 8, Jan 7, Jan 6, Jan 5, Jan 4, Jan 3, Jan 2, Jan 1, 1983

HIGHS AND LOWS S.E. ACTIVITY

Table with columns: 1983/84, Since Completion, High, Low, etc.

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Long-term speculative favourite in the market was the 5.1 per cent holding, in Stylo and dipped to 31p before settling a net 4 off at 81p; Stylo fell 7 more to 255p.

Business in the Electricals sector was again subdued and most quotations drifted a penny or so easier. Elsewhere, ICL featured with a rise of 7 to 39p following the optimistic tenor of the chairman's statement at the annual meeting. Ferranti, helped by acquisition news, improved 13 to 60p.

Quiet mines

A much quieter day in mining markets saw South African Golds close with modest gains for the second successive day despite a relatively unimpressive performance by the bullion price. The

European Options Exchange

Table with columns: Series, Vol., Last, etc.

La Rue, a recent favourite, reacted 20 to 57p along with Eastern Produce, 4 off at 192p. Slidaw came on offer after the annual report and gave up 17 at 408p, but favourable Press mention stimulated occasional demand for Keen and Scott, which improved 3 to 55p.

Profit-takers moved in on recently-firm Trident TV "A", which shed 4 to 136p, despite enquiries about a possible bid from fellow casino company Aspinall Holdings; the letter shed 1 to 132p.

Deerly moody worries hit Properties. Losses were widespread but, in most cases, relatively limited. The exception among the leaders, shedding 8 for a two-day fall of 14 to 268p, in the wake of the 270m Deben-ture issue announced on Tuesday; dealings in the stock began at 2.00 pm today.

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latter dipped \$3.25 to \$367.625 in ounce as the dollar resumed its recent upward movement against sterling and other currencies.

A good performance in overnight American markets ensured a firm opening for Golds but the subsequent drift in bullion encouraged light selling pressure which left the majority of issues well below their highest levels.

The Gold Mines index added 4.1 more at 546.6, for a two-day gain of 11.6. A number of the leading heavyweights posted good overall gains, notably Western Holdings and St Helena which improved around 5 1/2 pence to £22 and £29 respectively, and Free State Golds which added 2 at £24.

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European Options Exchange

Table with columns: Series, Vol., Last, etc.

EQUITIES

Table with columns: Issue Name, 1983/84, Stock, etc.

FIXED INTEREST STOCKS

Table with columns: Issue Name, 1983/84, Stock, etc.

"RIGHTS" OFFERS

Table with columns: Issue Name, Latest Return, 1983/84, Stock, etc.

OPTIONS

Table with columns: Deal, Declara, Settling, etc.

NEW HIGHS AND LOWS FOR 1983/84

Table with columns: NEW HIGHS (118), NEW LOWS (12)

RISES AND FALLS YESTERDAY

Table with columns: Rises, Falls, Same

LONDON TRADED OPTIONS

Table with columns: Option, Feb, May, Aug, etc.



FT LONDON SHARE INFORMATION SERVICE

HOTELS—Continued

AMERICANS

Table listing American stocks with columns for High, Low, Stock, Price, and % Change.

BRITISH FUNDS

Table listing British funds with columns for High, Low, Stock, Price, and % Change.

Over Fifteen Years

Table listing funds with a 15-year track record.

Over Fifteen Years

Table listing funds with a 15-year track record.

Undated

Table listing undated funds.

Index-Linked

Table listing index-linked funds.

CORPORATION LOANS

Table listing corporation loans with interest rates.

COMMONWEALTH AND AFRICAN LOANS

Table listing commonwealth and African loans.

LOANS

Table listing various types of loans.

Public Bond and Ind.

Table listing public bonds and industrial shares.

Financial

Table listing financial instruments.

FOREIGN BONDS & RAILS

Table listing foreign bonds and rail shares.

AMERICANS

Table listing American stocks (continued).

BRITISH FUNDS

Table listing British funds (continued).

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FOREIGN BONDS & RAILS

Table listing foreign bonds and rail shares.

BUILDING INDUSTRY, TIMBER AND ROADS

Table listing building industry, timber, and roads stocks.

DRAPERY—Continued

Table listing drapery stocks (continued).

ENGINEERING—Continued

Table listing engineering stocks (continued).

BEERS, WINES AND SPIRITS

Table listing beer, wine, and spirit stocks.

DRAPERY AND STORES

Table listing drapery and store stocks.

Hire Purchase, Leasing, etc.

Table listing hire purchase and leasing services.

DRAPERY—Continued

Table listing drapery stocks (continued).

ENGINEERING—Continued

Table listing engineering stocks (continued).

ELECTRICALS

Table listing electrical stocks.

CHEMICALS, PLASTICS

Table listing chemical and plastic stocks.

DRAPERY AND STORES

Table listing drapery and store stocks.

ENGINEERING

Table listing engineering stocks.

HOTELS AND CATERERS

Table listing hotel and catering stocks.

ENGINEERING—Continued

Table listing engineering stocks (continued).

ELECTRICALS

Table listing electrical stocks.

CHEMICALS, PLASTICS

Table listing chemical and plastic stocks.

DRAPERY AND STORES

Table listing drapery and store stocks.

ENGINEERING

Table listing engineering stocks.

HOTELS AND CATERERS

Table listing hotel and catering stocks.

INDUSTRIALS (Miscel.)

Table listing miscellaneous industrial stocks.

Table listing hotel and catering stocks (continued).

INDUSTRIALS (Miscel.)

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INDUSTRIALS (Miscel.)

Table listing miscellaneous industrial stocks.

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INDUSTRIALS—Continued

Table of industrial stocks including MCO, MCO, MCO, etc. with columns for stock name, price, and change.

LEISURE—Continued

Table of leisure stocks including LWT, LWT, LWT, etc. with columns for stock name, price, and change.

PROPERTY—Continued

Table of property stocks including M, M, M, etc. with columns for stock name, price, and change.

INVESTMENT TRUSTS—Cont.

Table of investment trusts including F, F, F, etc. with columns for stock name, price, and change.

OIL AND GAS—Continued

Table of oil and gas stocks including O, O, O, etc. with columns for stock name, price, and change.

SANYO INTERNATIONAL LTD. Roman House (3rd Floor) Wood Street, London EC2V 8BP United Kingdom. Telephone: 01-528-2931. Telex: 51812978 (SYSECO)

MINES—continued

Table of mining stocks including A, A, A, etc. with columns for stock name, price, and change.

Notes section containing various financial and legal notices.

PLANTATIONS

Table of plantation stocks including R, R, R, etc. with columns for stock name, price, and change.

TEAS

Table of tea stocks including T, T, T, etc. with columns for stock name, price, and change.

MINES

Table of mining stocks including M, M, M, etc. with columns for stock name, price, and change.

REGIONAL AND IRISH STOCKS

Table of regional and Irish stocks including R, R, R, etc. with columns for stock name, price, and change.

Options section containing information about 3-month call rates.

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

INSURANCE

LEISURE

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCO

TRUSTS, FINANCE, LAND

PROPERTY

INSURANCE

LEISURE

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCO

TRUSTS, FINANCE, LAND

PROPERTY

INSURANCE

LEISURE

OVERSEAS TRADERS

Table of overseas traders including O, O, O, etc. with columns for stock name, price, and change.

PLANTATIONS

Table of plantation stocks including R, R, R, etc. with columns for stock name, price, and change.

TEAS

Table of tea stocks including T, T, T, etc. with columns for stock name, price, and change.

MINES

Table of mining stocks including M, M, M, etc. with columns for stock name, price, and change.

REGIONAL AND IRISH STOCKS

Table of regional and Irish stocks including R, R, R, etc. with columns for stock name, price, and change.

OPTIONS

Table of options including O, O, O, etc. with columns for stock name, price, and change.

Oil and Gas

Table of oil and gas stocks including O, O, O, etc. with columns for stock name, price, and change.

AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Trusts, Capital Growth, and others, with columns for name, value, and change.

FT UNIT TRUST INFORMATION SERVICE

Table listing unit trusts from the FT Information Service, including Crown Unit Trust Services Ltd, Darlington Unit Trust Mgmt Ltd, and others.

Table listing Royal London Unit Trusts, Transatlantic and Gen. Sec. (a) (p), and other international unit trusts.

INSURANCES

Table listing various insurance companies and their services, including AA Friendly Society, Abbey Life Assurance Co, and others.

Insurances - continued

Table listing insurance companies like Albany Life Assurance Co Ltd, 2 Park Lane, Porters Bar, and others.

Property

Table listing property-related financial data and company names.

Heritage Co

Table listing Heritage Co and other related financial information.

PrifeEac

Table listing PrifeEac and other related financial information.

Scottish Provident Institution

Table listing Scottish Provident Institution and other related financial information.

CAL Investments (IOM) Ltd

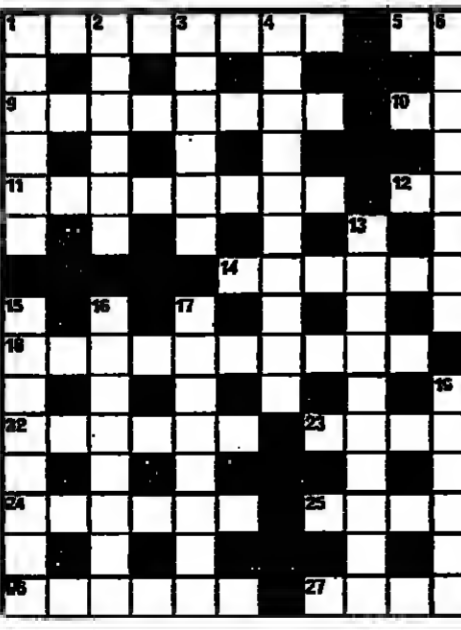
Table listing CAL Investments (IOM) Ltd and other related financial information.

Lazard Brothers & Co (Jersey) Ltd

Table listing Lazard Brothers & Co (Jersey) Ltd and other related financial information.

F.T. CROSSWORD PUZZLE No. 5,314

- ACROSS
1 Pile into a club to get blunt criticism (8)
5 Place where the artful work (6)
9 Businessman ratio ran riot (8)
10 Gain support by canvassing what's beaten and rising (4, 2)
11 Atlanta, for example, is excited (2, 1, 5)
12 Thrust half 1 down for excited talk (6)
14 Breakfast item could be tough (-4-6)
18 Firm's member to finish with one sign of hesitation (a sort of summary) (10)
22 N.Z. itch to make printed matter? (6)
23 Brilliant musician eodlessly superior within is upright (8)
24 Before this time? No, we're out of lice (3, 3)
25 Degrading row at back of court (8)
26 Bounteous rebellion? (8)
27 Uneasy? Work more! (6)
DOWN
1 Capital song-writer (6)
2 Where certain post has yet to be actioned (2-4)
3 Girl holds a right to self-defence (6)
4 Worker to pull up in greeting is radical (5-3)
6 Spanish performer in wild rodeo art (8)
7 Sort of blonde miss, it's said, used to keep fit (4-4)
8 Ready for inspection? No, a padre isn't orderly (2, 6, 8)
13 A girl, girl, so we hear, is judge! (10)
15 Cool see to summer weather? (3-5)
16 I am a con-producer to book almost at once (8)
17 Bargain and hit the soft stuff (4, 4)
19 Demonstrate at Lord's? (6)
20 The lad's mainly a creeper, stupid (8)



Solution to Puzzle No. 5,313



Offshore & Overseas continued

Table listing offshore and overseas financial information, including Acibonds Innomat Fund SA, Alliance Capital Management Ltd, and others.

Maney Fund Managers Ltd

Table listing Maney Fund Managers Ltd and other related financial information.

Maney Fund Managers Ltd

Table listing Maney Fund Managers Ltd and other related financial information.

Maney Fund Managers Ltd

Table listing Maney Fund Managers Ltd and other related financial information.

Money Market Bank Accounts

Table listing money market bank accounts, including Altkam Home, Nom AFR, and others.

INSURANCE & OVERSEAS MANAGED FUNDS

Table of insurance and managed funds, including sections for British National Life Assurance Co. Ltd., Canadian Life Group, and various international funds.

Table of insurance and managed funds, including sections for Swiss Life Assurance Co. Ltd., Swiss Life of Canada (UK) Ltd., and various international funds.

Table of insurance and managed funds, including sections for Swiss Life of Canada (UK) Ltd., Swiss Life of Canada (UK) Ltd., and various international funds.

Table of insurance and managed funds, including sections for Swiss Life of Canada (UK) Ltd., Swiss Life of Canada (UK) Ltd., and various international funds.

OFFSHORE AND OVERSEAS

Table of offshore and overseas managed funds, including sections for Swiss Life of Canada (UK) Ltd., Swiss Life of Canada (UK) Ltd., and various international funds.

NOTES
Prices are in pence unless otherwise indicated and those designated S with no prefix refer to U.S. dollars. Yields are shown in percent unless otherwise stated. A different price is shown for all currencies except the pound sterling. Values shown in parentheses are the values of the funds as at the end of the reporting period. A different price is shown for all currencies except the pound sterling. Values shown in parentheses are the values of the funds as at the end of the reporting period.

COMMODITIES AND AGRICULTURE

Speculative buying triggers new highs

BY JOHN EDWARDS, COMMODITIES EDITOR
ZINC VALUES surged further ahead on the London Metal Exchange to the highest levels for 9 1/2 years...

Storage aids for farmers approved

By Ivo Dawany in Brussels
PRIVATE storage aids to Europe's pig farmers were reintroduced yesterday after a five-month break...

Brazilian soya crop estimates seem over-optimistic

BY OUR OWN CORRESPONDENT
BRAZILIANS who were expecting 1984 soya crop of as much as 18.5 million tonnes now appear to have been over-optimistic...

The high prices now being offered to farmers for delivery in April and payment in May are better than the prices for maize, and considerably more attractive than those of cotton...

The renewed squeeze on immediately available supplies, and news that the U.S. Mint plans to hold a buying tender in mid-February for 4,500 tonnes of special high grade zinc encouraged further heavy speculative buying...

The decision to restore the support mechanism follows angry scenes earlier this week when French farmers burned Danish trucks carrying pig carcasses and attempted to stop imports at the Belgian border...

But if present price levels are maintained until most of the crop is harvested and sold, soya should earn Brazil more than \$3bn in 1984, and perhaps as much as \$4.7bn...

There is still some unhappiness about Brazil's soya crop price, which has fallen from a peak of 100 cents a bushel to 85 cents...

Sugar falls to 8-month low

BY RICHARD MOONEY
LONDON SUGAR futures prices slipped to the lowest levels since the end of April yesterday, in spite of opening the day on a fairly firm note...

The aluminium outlook is particularly bright, says the bank because stocks call "quite dramatically" last year, while demand is rising at an annual rate of around 7-8 per cent...

Quality and quantity fears push up potato values

BY BARBARA DALZIELL
POTATO futures rose sharply yesterday, with the April position on the London market clearing at £179.20 a tonne...

Minister warns on palm oil competitiveness

By Wong Sulong in Kuala Lumpur
DATUK PAUL LEONG, Malaysia's Primary Industries Minister, has sounded a note of caution over the sharp price rise of palm oil...

Pakistan estimates 6.5% rise in wheat output

BY MOHAMMED AFTAB IN ISLAMABAD
PAKISTAN'S Government has estimated the 1983-84 wheat crop at 13.2 million tonnes, 6.5 per cent higher than last year...

PRICE CHANGES

Table with columns: In tonnes unless stated otherwise, Jan 12 1984, + or - from previous, Jan 11 1984, + or - from previous

BRITISH COMMODITY PRICES

Table with columns: Commodity Name, Price, Change

AMERICAN MARKETS

Table with columns: Commodity Name, Price, Change

NEW YORK

Table with columns: Commodity Name, Price, Change

BASE METALS

ZINC and ALUMINIUM values rose strongly on the London Metal Exchange, especially the former, which responded to renewed speculative and "computer" buying activity...

COPPER

Amalgamated Metal Trading reported that in the morning cash Higher Grade Copper rose to 276.50...

NICKEL

Three months £310.05, 05.07.08.15.10. Korb: Three months £317. Turnover: 936 tonnes.

POTATOES

Follow-through buying encouraged movement in the market, which was buoyed by the news that...

WOL FUTURES

Sydney Crude Wool - Close (in order) buyer, seller, broker...

FINANCIAL TIMES

Jan 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Feb 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Mar 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Apr 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Jun 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Jul 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Aug 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Sep 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Oct 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Nov 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Dec 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

CHICAGO

Table with columns: Commodity Name, Price, Change

LONDON OIL

Gas oil opened \$100.00 higher following bullish U.S. stock figures. Prices retreated to a narrow range through most of the day...

CRUDE OIL FUTURES

Table with columns: Month, Yesterday's close, + or - Business done

TIN

Three months 2,500.00, 25.00, 20.00, 15.00, 10.00, 5.00, 0.00, 1980, 1981, 1982, 1983, 1984

COFFEE

Following a New York high close London opened £102.00 higher, reports credit balance between continued...

SOYABEAN MEAL

The market opened unchanged in London, but moved to a low of 111.00 (£114.50) five-day average for Jan 13...

MEAT/FISH

SMITHFIELD - Pence per pound: Beef: Scotch mutton, 50.00; New Zealand P.O. mutton, 50.00...

SOYABEAN MEAL

The market opened unchanged in London, but moved to a low of 111.00 (£114.50) five-day average for Jan 13...

SPOT PRICES

Table with columns: Commodity Name, Price, Change

GAS OIL FUTURES

Table with columns: Month, Yesterday's close, + or - Business done

LEAD

Lead-Morning: Three months 3300, 300.25, 300, 299, 98.50, 300, Korb: Three months 3297, 80.50, 80, 97.50...

GRAINS

Business done: Wheat: Jan 1990-118.60, 119.20, 119.75, 120.30, 120.85, 121.40, 121.95, 122.50, 123.05, 123.60, 124.15, 124.70, 125.25, 125.80, 126.35, 126.90, 127.45, 128.00, 128.55, 129.10, 129.65, 130.20, 130.75, 131.30, 131.85, 132.40, 132.95, 133.50, 134.05, 134.60, 135.15, 135.70, 136.25, 136.80, 137.35, 137.90, 138.45, 139.00, 139.55, 140.10, 140.65, 141.20, 141.75, 142.30, 142.85, 143.40, 143.95, 144.50, 145.05, 145.60, 146.15, 146.70, 147.25, 147.80, 148.35, 148.90, 149.45, 150.00, 150.55, 151.10, 151.65, 152.20, 152.75, 153.30, 153.85, 154.40, 154.95, 155.50, 156.05, 156.60, 157.15, 157.70, 158.25, 158.80, 159.35, 159.90, 160.45, 161.00, 161.55, 162.10, 162.65, 163.20, 163.75, 164.30, 164.85, 165.40, 165.95, 166.50, 167.05, 167.60, 168.15, 168.70, 169.25, 169.80, 170.35, 170.90, 171.45, 172.00, 172.55, 173.10, 173.65, 174.20, 174.75, 175.30, 175.85, 176.40, 176.95, 177.50, 178.05, 178.60, 179.15, 179.70, 180.25, 180.80, 181.35, 181.90, 182.45, 183.00, 183.55, 184.10, 184.65, 185.20, 185.75, 186.30, 186.85, 187.40, 187.95, 188.50, 189.05, 189.60, 190.15, 190.70, 191.25, 191.80, 192.35, 192.90, 193.45, 194.00, 194.55, 195.10, 195.65, 196.20, 196.75, 197.30, 197.85, 198.40, 198.95, 199.50, 200.05, 200.60, 201.15, 201.70, 202.25, 202.80, 203.35, 203.90, 204.45, 205.00, 205.55, 206.10, 206.65, 207.20, 207.75, 208.30, 208.85, 209.40, 209.95, 210.50, 211.05, 211.60, 212.15, 212.70, 213.25, 213.80, 214.35, 214.90, 215.45, 216.00, 216.55, 217.10, 217.65, 218.20, 218.75, 219.30, 219.85, 220.40, 220.95, 221.50, 222.05, 222.60, 223.15, 223.70, 224.25, 224.80, 225.35, 225.90, 226.45, 227.00, 227.55, 228.10, 228.65, 229.20, 229.75, 230.30, 230.85, 231.40, 231.95, 232.50, 233.05, 233.60, 234.15, 234.70, 235.25, 235.80, 236.35, 236.90, 237.45, 238.00, 238.55, 239.10, 239.65, 240.20, 240.75, 241.30, 241.85, 242.40, 242.95, 243.50, 244.05, 244.60, 245.15, 245.70, 246.25, 246.80, 247.35, 247.90, 248.45, 249.00, 249.55, 250.10, 250.65, 251.20, 251.75, 252.30, 252.85, 253.40, 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597.75, 598.30, 598.85, 599.40, 599.95, 600.50, 601.05, 601.60, 602.15, 602.70, 603.25, 603.80, 604.35, 604.90, 605.45, 606.00, 606.55, 607.10, 607.65, 608.20, 608.75, 609.30, 609.85, 610.40, 610.95, 611.50, 612.05, 612.60, 613.15, 613.70, 614.25, 614.80, 615.35, 615.90, 616.45, 617.00, 617.55, 618.10, 618.65, 619.20, 619.75, 620.30, 620.85, 621.40, 621.95, 622.50, 623.05, 623.60, 624.15, 624.70, 625.25, 625.80, 626.35, 626.90, 627.45, 628.00, 628.55, 629.10, 629.65, 630.20, 630.75, 631.30, 631.85, 632.40, 632.9

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Further records for dollar

The dollar rose to record levels against several European currencies in active foreign exchange trading, and to a 10-year peak against the D-mark and a six-year high in terms of the Swiss franc.

Against the Japanese yen, compared with ¥235.55, the dollar's value rose to a highest ever 122.3 against the yen.

Other major currencies, rising to DM 3.87 from FF 12.150, and Sfr 3.1450 from Sfr 3.1250, were unchanged at ¥237.50.

STERLING - Trading range against the dollar in 1983-84 is 1.6245 to 1.2985. December average 1.6434. Trade-weighted index of £1 compared with \$1.8 at noon; £1.7 in the morning; \$1.5 at the previous close; and \$1.6 six months ago.

FINANCIAL FUTURES

Record volume

Gold prices were marked down to record volume in the London International Financial Futures yesterday. Values moved in line with a softer cash market with the latter reacting to Tuesday's disappointing UK money supply figures.

High, beating the previous best of 9,705 set in August last year. Short sterling prices were also lower. The March contract fell from an opening level of 90.46 to a low of 90.36 before closing at 90.35 down from 90.50.

THE POUND SPOT AND FORWARD

Table with columns: Jan 11, Day's spread, Close, One month, % Three months, % Six months. Rows include U.S., Canada, West Germany, Denmark, etc.

THE DOLLAR SPOT AND FORWARD

Table with columns: Jan 11, Day's spread, Close, One month, % Three months, % Six months. Rows include U.S., Canada, West Germany, Denmark, etc.

OTHER CURRENCIES

Table listing exchange rates for Argentina, Australia, Brazil, Canada, etc.

CURRENCY RATES

Table listing currency rates for Sterling, U.S. Dollar, etc.

CURRENCY MOVEMENTS

Table showing currency movements for Sterling, U.S. Dollar, etc.

EXCHANGE CROSS RATES

Table showing exchange cross rates for Pound Sterling, U.S. Dollar, etc.

EURO-CURRENCY INTEREST RATES

Table showing Euro-currency interest rates for Sterling, U.S. Dollar, etc.

MONEY MARKETS

London money market interest rates remained firm yesterday, on concern about the weakness of sterling against the dollar and the disappointing UK December money supply figures published on Tuesday.

MONEY RATES

Table showing money rates for Overnight, One month, etc.

FT LONDON INTERBANK FIXING

Table showing FT London interbank fixing for One month, Three months, etc.

DISCOUNT HOUSES DEPOSIT AND BILL RATES

Table showing discount houses deposit and bill rates for Overnight, One month, etc.

MONEY RATES

Table showing money rates for New York (Lunchtime), Treasury Bills, etc.

MONEY RATES

Table showing money rates for London, New York, etc.

FT LONDON INTERBANK FIXING

Table showing FT London interbank fixing for One month, Three months, etc.

MONEY RATES

Table showing money rates for London, New York, etc.

COMPANY NOTICES

NOTICE TO HOLDERS OF EUROPEAN DEPOSITARY RECEIPTS ISSUED IN YAMAICHI SECURITIES CO., LTD. Further to our notice of September 27, 1983, EDR holders are informed that the Depositary has received...

ART GALLERIES. NOTICE OF RATE OF INTEREST. NATIONAL WESTMINSTER BANK PLC. NOTICE IS HEREBY GIVEN that a dividend of 10% on the ordinary shares of the bank...

FINANCIAL TIMES

PUBLISHED IN LONDON & FRANKFURT. Head Office: The Financial Times Limited, One Cannon Street, London EC4A 3DF. Telephone: 01-5740000. Frankfurt Office: The Financial Times (Europe) Ltd, Schillerstrasse 54, D-6000 Frankfurt am Main, West Germany. Telephone: 0211-37231.

CONTRACTS

MoD places £12m order with Marconi

The Ministry of Defence has placed a production order worth £12m for the Marconi AN/TPQ-17 radar. The contract is for the production of 100 radar sets for the Royal Navy's Type 23 frigates.

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CONTRACTS

Olympics work for Rank Xerox

Rank Xerox has been awarded a contract worth £1.2m for the conversion of the existing buildings at the Olympic Village in Sarajevo, Yugoslavia, for the 1984 Winter Olympics.

CONTRACTS

SAUNDERS-ROE DEVELOPMENTS

SAUNDERS-ROE DEVELOPMENTS has secured a £1.5m order from Ferranti for metal mercury switches using the manufacturing technology recently acquired in a licence arrangement with Ferranti.

UDDEVALLAVARVET A.B. NOTICE OF PARTIAL REDEMPTION To the Holders of 7 1/2% Guaranteed Notes due August 1, 1984

NOTICE IS HEREBY GIVEN, pursuant to the provisions of the Paying Agency Agreement dated July 22, 1977 made between Uddevallavarett A.B. and Orion Royal Bank Limited...

Table with 5 columns: Amount, 27, 38, 47, 56, 101; 31, 42, 50, 60, 108; 36, 44, 55, 100, 110

have been selected by lot by the Paying Agent pursuant to Condition 3(e) of the said Guaranteed Notes for redemption on February 1, 1984 for sinking fund purposes only.

Orion Royal Bank Limited (Principal Paying Agent) 1 London Wall, London EC2Y 5JX

Morgan Guaranty Trust Company of New York Avenue des Arts 35, Brussels 1040, Belgium

The coupon maturing on February 1, 1984 should be detached from the Guaranteed Notes before presentation and should be presented by the holder in the usual way.

NOTICE IS ALSO HEREBY GIVEN pursuant to the terms of the said Paying Agency Agreement that all interest on the 7 1/2% Guaranteed Notes so called for redemption shall cease to be payable from and after the said February 1, 1984 and coupons for interest accruing after such date upon the 7 1/2% Guaranteed Notes shall be void.

DATED: LONDON, 12th JANUARY, 1984

For and on behalf of UDDEVALLAVARVET A.B. by PRINCIPAL PAYING AGENT

ORION ROYAL BANK LIMITED A member of The Royal Bank of Canada Group

Brasilvest S.A.

Net asset value as of 31st December, 1983 per Cr\$ Share: \$15,537 per Depository Share: U.S.\$5,773.62

NOTICE OF PURCHASE

EUROPEAN INVESTMENT BANK 8 1/2% STERLING US DOLLAR BONDS OF 1977

The Bank of Nova Scotia

U.S.\$200,000,000 Floating Rate Debentures Due July 1994

Eurodollar success for Nippon Telegraph

By Peter Montagnon in London

NIPPON Telegraph and Telephone scored a big success in the Eurobond market with the launch yesterday of a \$100m six-year 11 1/2 per cent bond at par through Banque Paribas and IBI International.

The bonds were snapped up quickly by investors anxious to avail themselves of a rare opportunity to acquire state-guaranteed Japanese paper.

Bankers said that the success of the issue, which is understood to have been firmly placed with final

investors yesterday, underscores the selection of currently dominant investor attitudes to the market.

It contrasts with the rather slower response to some other recent issues, including the \$100m, 12 per cent issue by Beneficial Corporation, which was priced yesterday at 99 by lead manager Credit Suisse First Boston and still traded at a discount of about 1 1/2 points.

Equally, Tuesday's issue for the European Investment Bank has met a relatively slow response, although it was increased yesterday to \$150m from \$100m by lead manager Nikko Securities.

Part of the issue, which bears a coupon of 11 1/2 per cent, is being placed privately in Japan. Non-Japanese investors may opt to hold the bonds for only seven years, rather than their full 15-year life.

Among other new deals yesterday was a \$40m, five-year bond with equity warrants from Recovon Inc, the Japanese clothing distributor. Led by Daiwa Europe, Robert Fleming and Nikko Securities, the bonds bear an indicated coupon of 8 1/2 per cent and a warrant exercise premium of about 2 1/2 per cent. Another equity-linked issue is expected later this week for Computer Products of Florida.

Secondary market trading in most bond markets was quiet yesterday. In Germany, Spain postponed its planned DM 200m issue, while R. J. Reynolds instead launched a DM 125m, ten-year bond with a coupon of 7 1/2 per cent at par through Deutsche Bank.

WestLB is raising Ecu 50m over seven years through a 10 1/2 per cent bond at par by WestLB, Kreditbank International and Chase Manhattan, while Japan Development Bank has received a lower than expected 5 1/2 per cent coupon for its SwFr 100m, ten-year issue, led by Swiss Bank Corporation.

Muller to join Cedel

By Our Euromarkets Correspondent

CEDEL, the Eurobond clearing house, has appointed Mr Georges Muller, previously head of foreign exchange and treasury operations at Societe Generale in Paris, to be its new director of financial control.

The appointment, which is effective from next Monday, has aroused speculation in the market that Mr Muller will eventually succeed Mr Joe Galazka as managing director of Cedel.

Cedel has, however, not yet made any formal announcement about a successor to Mr Galazka, who has a long association with the bond markets and was with Merrill Lynch in London before moving to head up Cedel's operations in Luxembourg.

INTERNATIONAL CAPITAL MARKETS

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. The following are closing prices for January 11.

Table with columns: Issued, Bid, Offer, Change on day week, Yield, and various bond details.

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Gulf United Corporation

has sold its

Insurance Businesses

to

American General Corporation

The undersigned acted as financial advisor to Gulf United Corporation in this transaction.

Lehman Brothers Kuhn Loeb

NEW YORK • ATLANTA • BOSTON • CHICAGO • DALLAS HOUSTON • LOS ANGELES • SAN FRANCISCO • LONDON • TOKYO

January 3, 1984

Southern Pacific Company

and

Santa Fe Industries, Inc.

have combined to form

Santa Fe Southern Pacific Corporation

The undersigned acted as financial advisor to Southern Pacific Company in this transaction.

MORGAN STANLEY & CO.

Incorporated

December 23, 1983

Fuji International Finance (HK) Limited

Guaranteed Floating Rate Notes Due 1996



The Fuji Bank, Limited

Notice is hereby given that the Rate of Interest for the Initial Interest Period has been fixed at 10 1/2 per annum and that the Interest payable on the relevant interest payment date, 12 July, 1984, in respect of US\$10,000 nominal of the Notes will be US\$518.19.

January 12, 1984, London BPI Citibank, N.A. (CSI Dept), Agent Bank CITIBANK

PINTURAS PITTSBURGH IBERICA, S.A.

A SUBSIDIARY OF PPG INDUSTRIES, INC., PITTSBURGH, U.S.A.

HAS ACQUIRED THE SYNTHETIC RESINS PLANT OF

INDUSTRIA LEVANTINA DE PINTURAS, S.A., VALENCIA, SPAIN

BANCO DE PROGRESO ACTED AS FINANCIAL ADVISOR TO PPG INDUSTRIES, INC.



Banco de Progreso

GRUPO MARCH MERCHANT BANKERS Nuñez de Balboa, 108 Madrid-6

UNION DE BANQUES ARABES ET FRANCAISES - U.B.A.F.

U.S.\$65,000,000 Floating Rate Notes 1980-1990

In accordance with the conditions of the Notes notice is hereby given that for the six-month period 12th January 1984 to 12th July 1984 (182 days) the Notes will carry an interest rate of 10 1/2 per cent.

Relevant interest payments will be as follows: Notes of \$1,000 U.S.\$52.77 CREDIT LYONNAIS, Luxembourg Fiscal Agent



# FINANCIAL TIMES SURVEY

## Manufacturing Automation

Major technological developments have made possible the sudden and rapid growth of the manufacturing automation market in the last few years. Some of the world's biggest companies are already competing for a share of the rich rewards. Others will soon follow

**THE RUSH** is on—to sell, install and profit from the new potential for automating a wide range of industrial production. Experts anticipate that more than \$100bn will be spent in Western Europe and North America between now and the end of the decade on manufacturing automation. More and more manufacturers are already benefiting from the cost-effectiveness of computer aided design (CAD) systems, automated machine tools, robotised assembly processes and automated warehouses.

But the pressure to cut production costs persists, and many manufacturers are now looking at, and installing, more advanced automation systems, such as flexible manufacturing systems (FMS) and completely automated assembly lines.

Not surprisingly, the traditional suppliers of factory equipment are finding themselves being jostled by a lot of newcomers eager to participate in this growth market.

Some of the world's largest companies—General Electric, IBM and Westinghouse of the U.S., General Electric Co of the UK and Siemens of West Germany—have joined the fray, and others will follow.

The relatively sudden emergence of the manufacturing automation market is due to a few major technological developments in electronics in the past few years, especially the great reductions in cost and size of computer memories. These developments have meant that highly complex systems, such as CADs and programmable controllers, can be built and programmed at reasonable cost and convenient size.

By IAN RODGER

Another key development was numerical control which, when allied with computers, turns machine tools and robots into highly flexible and easy-to-use instruments.

Until these developments came along, automation remained the preserve of industries in which manufacture was a relatively simple and/or high volume operation, such as some chemical production, where process plant is custom built and controlled by a limited number of relays, switches and thermostats acting on valves.

The new technologies offer the potential of turning any type of manufacturing into an automated process, even if production batches are quite small. Just as vinyl chloride and other chemicals go into an automated process which produces PVC, so one day a load of materials may be put into a totally automated process that yields various models of cars or telephones or computers at the other end.

This may sound a bit far-fetched, but experts agree that, with a few small exceptions, the technologies are already available that would permit such large scale automation. "We have got more technology than we can implement in the next ten years," says Mr Tom Gunn, managing director of the computer integrated manufacturing group at consultants Arthur D. Little. "The problem is training people to implement it."

The rate of implementation is also being influenced by industry's ability to afford it and the natural reluctance of most production managers to install any equipment or system that is not fully tried and tested.

That is why the areas of fastest growth within the manufacturing automation field today are CAD and robotics.

On average, CAD systems offer users a threefold increase in productivity compared with the conventional design process in which engineers draw their designs on paper. If a program is added to turn computer generated designs into numerical control data for machining, then further benefits arise from this computer aided manufacturing (CAM). The cost of a single CAD-CAM system can be as low as \$20,000 and a potential purchaser can be confident that it will work and that it can be installed in his draughting room. There is no need to tear out a lot of existing machinery or construct a new building for it. Similarly, manufacturers are finding that there are some points in their operations

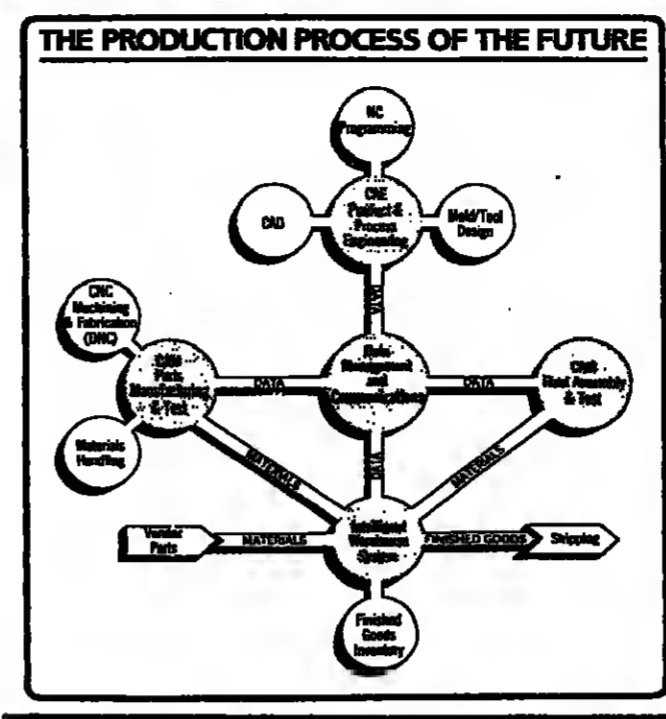
where a robot can be installed with a minimum of disruption and bring instant cost benefits. The world CAD-CAM market has been growing at over 30 per cent annually for the past two years, and Merrill Lynch Capital Markets estimates it will grow even faster this year, by 45-50 per cent to \$2.3bn.

**Growing market**

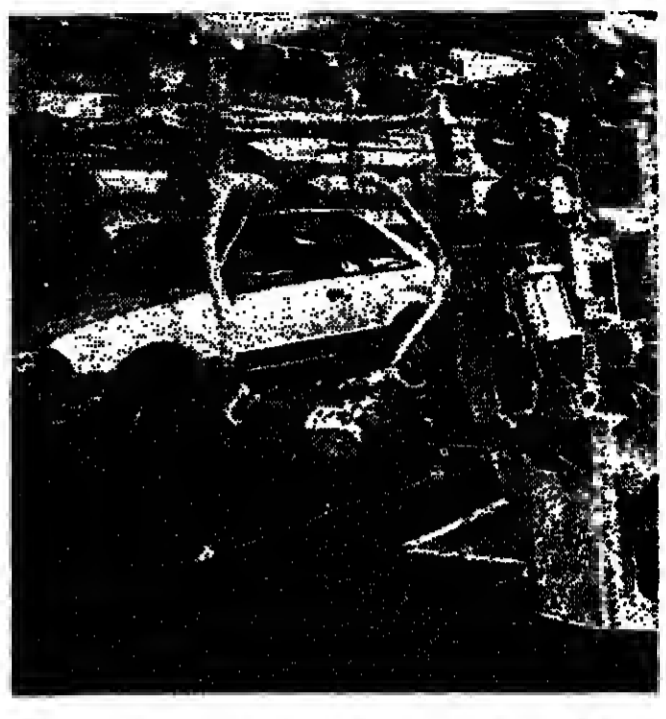
The robot market is worth about \$500m and growing at more than 25 per cent per year. By contrast, the demand for machine tools has been depressed for up to three years in most industrialised countries, and is unlikely to recover quickly.

Any manufacturer contemplating retooling today has to consider the feasibility of installing an automated machining system rather than simple machine tool replacements. Systems are more expensive and technically complex than machines and often require some modification to the factory floor, and so a purchaser is likely to take considerable time making a decision. Moreover, one of the objectives of a system is to make fuller use of machines, with the probable result that fewer machines will be required to do the same amount of work.

On the other hand, an ever increasing proportion of spending on manufacturing automation will go into computers, controls and especially software. This is what has attracted to the field the big electric equipment manufacturers, such as General Electric and Westinghouse, and the computer and



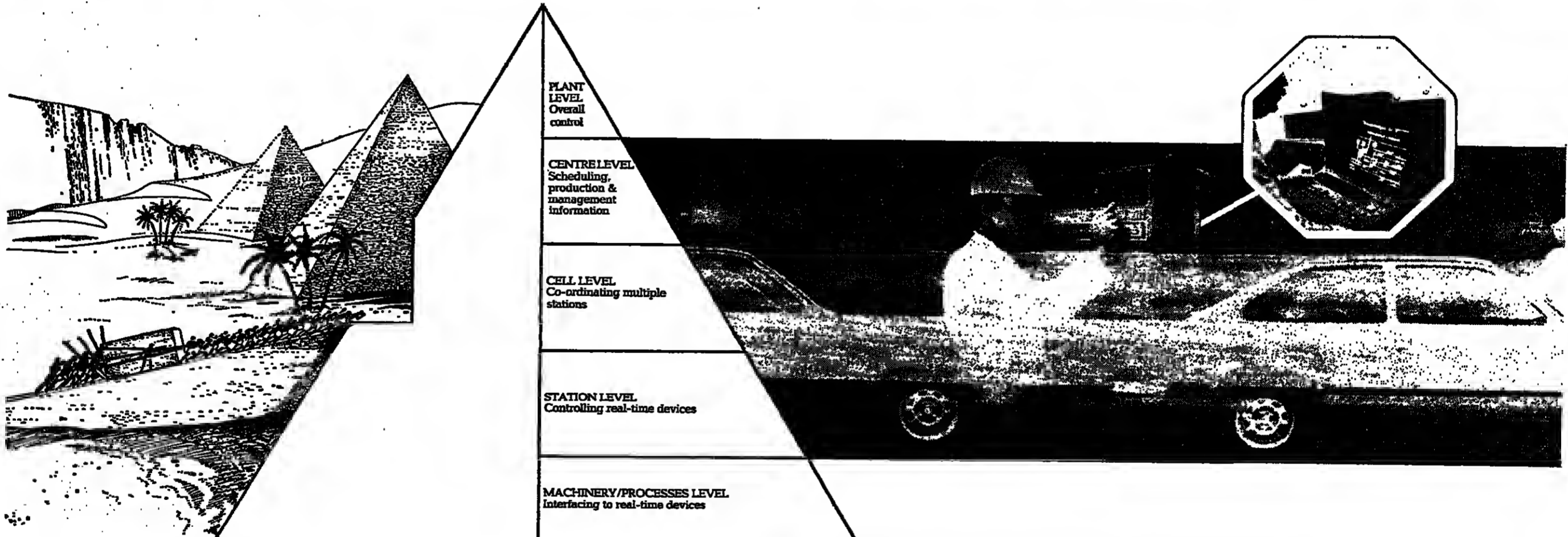
The Financial Times is organising its second automated manufacturing conference for March 27 and 28 at the Hotel Inter-Continental in London. Further details are available from the FT Conference Organisation, Westminster House, Arthur Street London EC4A 4DF. Tel 01-421 1355



Motor manufacturers are among the heaviest investors in automation. Above: a six-axis KUKA industrial robot mounting a wheel on a Ford Escort

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## MANUFACTURING AUTOMATION II

Technological developments in only a few key areas explain the industry's sudden growth. Here the major advances are considered.

### 'Seeing' machines take their first steps

#### Robots

PETER MARSH

ROBOTS that see are making their first, tentative steps on to the factory floors of the industrialised world.

The machines are more advanced versions of the "blind, deaf and dumb" robots whose population over the past few years has grown at a rate of some 30 per cent annually.

The "seeing" machines number no more than a few hundred and are only just making their way out of the research laboratories.

They usually require special lighting and advanced programming techniques. As yet, they cannot be relied upon not to go wrong in the hurry-burry of the typical industrial workshop.

But the hardware seems likely to become gradually more accepted in some areas of industry, especially where manufacturers want to link conventional robots to tasks such as inspection.

To use the most widely accepted definition, a robot is nothing more than a mechanical arm, controlled by a computer. By changing the program in the computer, an engineer can instruct the machine to do different jobs.

In this way, for example, an industrial robot with a welding torch can alternate between joining together lumps of metal

of different sizes. Such machines are far from those envisaged by Mr Karel Capek, the Czech writer who brought the word "robot" into the English language.

The devices that figured in RUR, Mr Capek's play of the 1920s, were true humanoids that behaved like people and gradually took over the world.

The machines could see, feel and think like humans. By contrast, only a tiny proportion of the 40,000 or so industrial robots in the Western world can take note of their surroundings and react accordingly.

In ordinary robots, an engineer programs the device in a set way. The robot then continues in a fixed pattern, for example, in taking finished items off a conveyor and putting them in boxes.

The routine may be disrupted if, for instance, an object is substituted other than the one that the robot expects. But a conventional robot will carry on regardless, sometimes with disastrous results for factory managers.

A machine that senses its surroundings, perhaps with a TV camera or with devices that register touch, could be one way out of an engineering dilemma.

Most robots with sense feature a camera that records pictures of the items that the robot is handling. The camera sends details of the images, in the form of digital code, to a computer which processes the data.

With this technique a robot perceives the identity of objects

#### APPLICATIONS FOR PROGRAMMABLE ROBOTS (U.S. 1981)

Welding	1,500
Handling metal in foundries	850
Machine loading	840
Painting	540
Assembly	400
Other	870
Total	4,700

Source: Frost and Sullivan

#### PRODUCTION OF PROGRAMMABLE ROBOTS (1982)

Japan	7,000
U.S.	1,800
Europe	3,200

Source: Frost and Sullivan

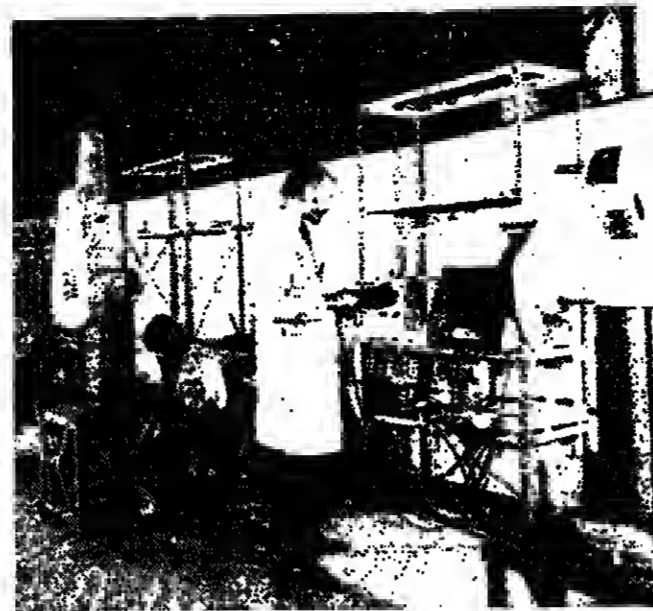
in front of it and modifies its action accordingly. For example, the machine would pick up a steel bar in a different way to a china tea cup.

In recent years, advances in computer software and the reduction in the cost of solid-state memory have produced vision systems for robots at a price that factories can afford.

Several manufacturers are selling vision equipment for robots at about £25,000. The equipment can be added to ordinary "blind" robots that cost between £20,000 and £50,000.

#### Academic deals

Most of the companies that are leaders in this technology are in the U.S. They include



Unimation (Europe) engineers test the final consignment of 24 PUMA robots built at the company's Shropshire headquarters and destined for a Spanish customer. Worth £750,000, it is the largest single order Unimation has received.

Automatic, Perception and SRI International.

In Britain, in the past couple of years at least four companies have signed deals with labor-tories or the academic world to sell vision equipment. They are British Robotic Systems, Omnicron Electronics, Rediffusion and Computer Recognition Systems.

These organisations are selling hardware developed respectively, at the National Physical Laboratory, London's University College, Manchester University and Brunel University.

Among the pioneers in vision hardware for robots is General Motors, the American car giant. Back in 1961, the company installed the world's first industrial robot.

And for more than two years the company has operated in one of its Canadian factories two robots equipped with TV cameras. The machines pick up castings that are positioned randomly on a conveyor belt.

Most applications for "seeing" machines are, however, likely to be in areas con-

## The prophecies begin to come true

### Computer aided design

GEOFFREY CHARLISH

WHEN THE digital computer first took root in the late 1950s experts predicted that within a decade single machines would constitute factories. But no such totally embracing implementation could ever have occurred — for organisational and so-called reasons that soon became obvious. Only incremental progress was on the cards.

Over the years "islands" of computer automation have formed, initially to manage production scheduling, for example, or to run unmanned machine tools.

Later, computer aided design (CAD) emerged, in which drawings could be constructed on a TV screen, manipulated, updated and stored electronically. Meanwhile, at the other end of the factory — at any rate the electronics industry — product complexity demanded that production testing be carried out by computer.

The next arrival was the robot, and it too was controlled by computer.

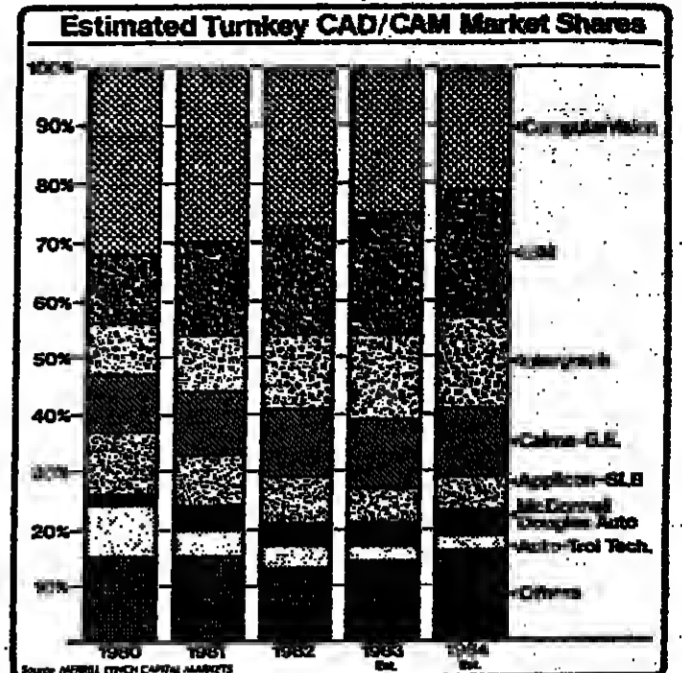
The position at the dawn of 1984 is beginning to come true. But the computing power is distributed, not centralised.

Now the time is coming for those distributed islands of automation to be bridged and the acronym on the experts' lips is CIM, or computer integrated manufacturing.

The driving force for what is the most important fundamental change in manufacturing since steam power is coming from major CAD components such as Computer Vision, IBM, Intergraph, U.S. General Electric (which embraces both Calma and EDRC), Applicon (in the Schumberger group), McDonnell Douglas Automation, Hewlett Packard and Autotrol. But there are 100 other companies with their eye on this \$1.5bn world market, such as Ferranti Cecac and Racal Redac in the U.K. In addition, most of the computer companies offer systems of which Sperry's Unisaid is a good example.

It was soon realised by the CAD software experts that once all the dimensions of a product had been defined it would be logical to extend the "computer aided" idea beyond design and into production areas.

Thus, CAE or computer aided engineering, was born, in which the "what if" methods of prototyping can be carried



out on-screen without cutting any real metal at all. For example, a crane jib or an aircraft wing can be loaded until it buckles and the failure points observed. The stresses can be seen as different coloured areas on the "solid" model on the screen. Thermal and kinematic properties can also be studied — some software will animate the moving parts of, say, a car engine.

Some of the software allows the 3D solid colour model, with definition not far short of a colour photograph, to be "opened up" to see what is inside. With systems like this, separate component parts can be designed and then assembled on the screen.

Impressive

Although these facilities are impressive, the system is only doing what a human brain would do with the same data on many drawings and other pieces of paper. But it is doing it hundreds of times faster: the paperwork disappears and there are no errors. Moreover, all the interested parties in design offices and management, armed with terminals, will always have access to exactly the same information. Better products, designed more quickly and cost effectively, are the result.

A further derivative of CAD is CAM, or computer aided manufacturing. From the same collection of comprehensive information about the product (common database), the computer can derive moulds, dies, tools and machining strategies. Some systems allow engineers

to visually verify NC programs — the tool can be seen moving around the machined part.

Similarly, the movements of co-ordinate measurement machines can be pre-planned, allowing inspection procedures to be worked out in advance.

The common database also allows "group technology" to be implemented: the designer can scan it to look for past designs that are similar to his current project, avoiding "re-inventing the wheel".

The final step, CIM, will not be suddenly implemented universally. It will grow in many medium-sized and large companies from a basis of enhanced CAD/CAM/CAE.

For example, robots can be programmed on screen and robots are already fairly common in manufacturing cells controlled by another computer. The two must communicate.

Similarly, guided cranes and computers must speak to, say, the flexible manufacturing system (FMS) the vehicles are supplying.

Similarly, in electronics manufacturing, product testing requirements can be considered at the design stage by linking test programming terminals to CAD terminals. Several auto-test companies have announced network products.

Apart from a need for standards to allow easy linking of items from different manufacturers, CIM, which is a philosophy, not a technology, is evidently something that leaves no department of a manufacturing company untouched. Decisions to implement have to come from the top.

Ian Rodger reports on Ford's use of CAD

## Fascinating trick with a practical purpose

IT DOESN'T seem to matter how often you see a demonstration of a computer aided design (CAD) system, the sight of a sketch of an object rolling around on a video display tube remains fascinating to watch.

It is even more fascinating when you see this trick being used for practical purposes.

Ford Motor is one of the pioneers in the use of CAD technology, having invested more than \$100m in these systems since 1968. The main attraction of CAD to automobile manufacturers is the help it can provide in reducing the industry's long lead time from the design to production stages.

There are other benefits as well, notably in improved design and greater productivity from designers.

Although it would be possible to design a new car on a CAD system, Ford and other manufacturers still prefer to convert stylists' concepts into clay models as a first step.

When a design is accepted at Ford, a co-ordinate measuring machine goes over it, recording the co-ordinates of enough points to enable the CAD system to make a mathematical model of it.

The first job of the CAD system is to point out small, invisible imperfections in the lines of the model. The designer can then direct the system to smooth out the lines, resulting ultimately in better quality body panels.

Then the design is passed on to specialised engineers who focus on particular components — door frames and panels, fenders, bonnet, etc. — and develop, on screen, detailed drawings for them.

This, say the engineers, is the stage at which the capacity to rell the design is so valuable. It enables them to see, rather than try to imagine, the consequences on all aspects of the component of a proposed addition or alteration, and thus the potential for error is reduced.

Ford estimates that the average engineer can produce three times as much work in



Using a light pen, an operator can modify the image on the Lundy tube of the Prime Computers system

a given period of time at a CAD workstation than he could at a draughting table. As an extreme example, the design of a simple flange around a car windscreen can be done in 10 seconds on a workstation compared with four days on paper.

The other benefit at the engineering stage is a program in the system which enables the operator to analyse the structural integrity of the component he has engineered. The use of this program, which is recognised by the inspection authorities, means that the time-consuming and expensive requirement to build complete prototypes of cars can be reduced from eight to three.

As Ford's design activities in Europe are split between Dunton in Essex and Cologne in West Germany, the company's CAD network includes workstations at both centres and engineers regularly exchange drawings to ensure the co-ordination of their progress.

The final functions of the Ford CAD system are to help design dies, and stamping tools for making body parts and then to develop the numerical data needed for

automated machining of the tools and dies. These processes mean that the company can bypass the traditional step of making wood models of the tools and dies prior to making production series, saving about four weeks.

Ford has developed special programs for designing draw dies — the devices that produce the folded back edges on stampings — and speeded up that process by six months.

Blinders, the tongue-and-groove formations on the rims of tools and dies that grip the edges of the metal sheet during stamping, can now be drawn in four weeks less than they could on paper.

Another program is being developed to produce specifications for rough castings for dies and stamping tools, which will eliminate the need to make patterns.

Ford finds that further time is being saved in the preparation stage because tools and dies tend to be more accurate and require less hand finishing.

Ford is sufficiently pleased with its CAD system — known as PDGS (for Product Design Graphic System) — to recently give Prime Computer, which supplies the hardware, the marketing rights in the UK.

# AT LAST, A BRITISH COMPANY WITH A SYSTEMS APPROACH TO FACTORY AUTOMATION

Those firms in manufacturing industry, large or small, that don't automate will decline rapidly in competition with the increased efficiency of those that do.

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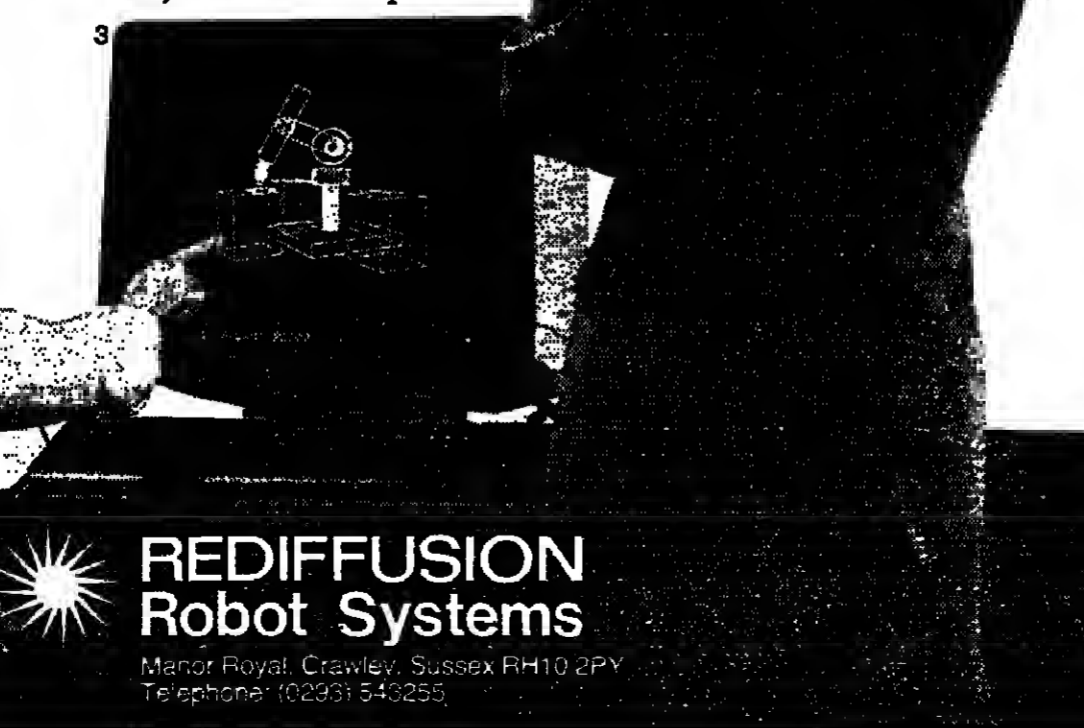
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1. A precision application of the Reflex robot.
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MANUFACTURING AUTOMATION III

Poised for a great leap forward

EVEN AFTER three years or so of public discussion, a dozen conferences and the publication of a new magazine on the subject, many European boards of directors must still be wondering if the flexible manufacturing system, FMS, is any more than an academic concept in the mind of some new breed of production engineer.

World-wide there are only about 100 systems running; most of them are in Japan, which has twice as many as the U.S. In Britain there are barely a dozen, although interest has accelerated in the last year since the Department of Industry launched its support scheme.

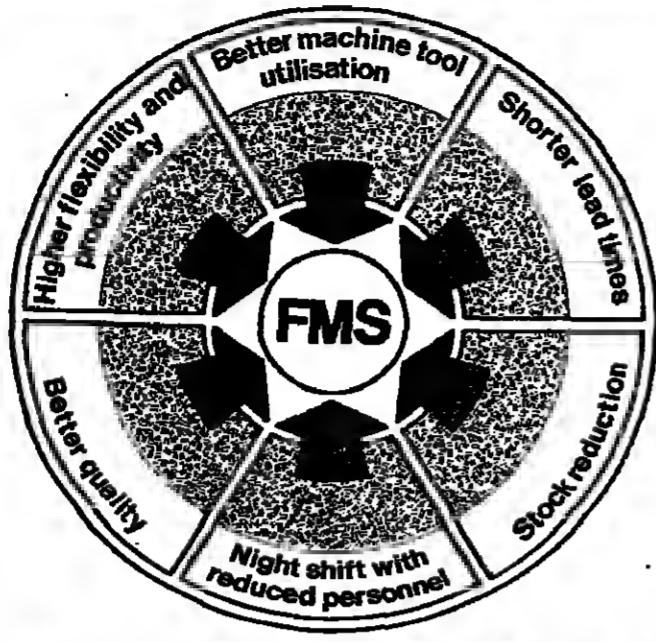
Over 100 firms have applied, of which 35 have been selected to receive consulting costs assistance and a further 17 to receive money for actual FMS projects. Over £10m has been dispensed.

What is FMS all about? It is planned to make 500,000 motor cars or 5m telephones, dedicated "fixed" automation is employed, in which component parts for those products, and only those parts, are made at minimum cost until the product runs stop, perhaps years later. The machinery will not make anything else.

If, on the other hand, one is manufacturing say, 100 types of industrial pump, or 200 shapes and sizes of gearwheel, the ideal system would make any number of any type of item on demand, to be shipped tomorrow to fulfil orders placed yesterday.

In fact, thousands of machine and assembly shops world-wide are faced with trying to deploy an assortment of machinery to meet orders as best they can. Reams of production planning paper (or the equivalent computer) and distributed heaps of work in progress are customary results. It is often in this micro-mess and mid-variety world of manufacturing that unprofitability is to be found.

The idea of FMS is to link production machines (to date mainly machine tools) by means of handling devices (such as robots), transport



systems and communications lines, with overall control by computer. At any moment the computer knows exactly where each component is and what is happening to it. Then, many different components of the same general size and kind can be made, assembled, inspected—perhaps even finish-processed and packed, in any sequence and without stopping the system.

Flexible manufacturing systems

GEORGE CHARLISH

At all times the computer directs the progress of each component and decides what process to apply, selecting, say, the right cutter or the right inspection gauge.

The main advantage of FMS is the reduction of lead times, work in progress and direct labour. But it also allows shorter product lifetimes and more new products. In the UK in particular it is doubtful if companies can afford to spend three years planning and launching new products when competitors in Japan and elsewhere can do it in half the time with FMS.

The first British system to attract attention, early in 1981, was a Normair Garret, a Westland Group subsidiary making a variety of aircraft components. Then about a year ago the 600 Group unveiled Scamp for turned components following a £3m research programme funded by the Department of Industry.

Scamp deploys four lathes, gear shaping and chamfering

machines, cylindrical grinders, a hobbing unit and a broaching machine. They are fed via conveyors and six robots, all under the control of a pair of mini-computers. Small batches are being machined, untouched by hand, in three days whereas conventional manufacture might take eight weeks and 50 handlings.

Elsewhere in Europe, a system that will make all the parts for a wide range of refrigeration compressors, to be delivered soon to Borg Warner in New York, is being made by the Italian company Comau of Modena.

In France, Citroen is commissioning a system at the Meudon plant in Paris that will cope with milling, drilling and boring of castings to make cylinder heads, gearbox casings and differential housings. In West Germany, Trumpf of Stuttgart has developed a system to deal with sheet metal parts. Topping the list in terms of scope and technology however, is the work being sponsored in Japan by the Ministry of International Trade and Industry (MITI).

The approach has been to start "from scratch" and include production of the metal parts themselves. New hot metal forming processes are being developed to ensure that any parts used in the subsequent machining and assembly systems will be as near to the final shape as possible. Metal removal is reduced to a minimum.

Under construction at Tsukuba Science City is a test plant that will integrate such processes with laser machining, complex multithreaded machining systems and automatic inspection. The project, started in 1977, is due for completion, appropriately enough, in 1984.

Minding the quality and feeling the width

QUALITY CONTROL has become all-important in manufacturing today, and one key to quality is thorough product inspection.

Inspection is a huge field. A great variety of examinations may be needed for different components and products—to test for strengths, colour, finish, porosity, heat sensitivity and many more characteristics. Many of these inspection procedures are inevitably highly specialised, and some can be automated more effectively than others.

However, the one type of inspection that is common to all manufactured products is that to determine conformity to the required shape. Fortunately, this type of examination also lends itself well to automated techniques.

Traditionally, inspection for shape was carried out with micrometers and various types of calipers and gauges, but since the 1960s co-ordinate measuring machines (CMM) have been used in an increasing number of applications. A CMM is basically a table with an overhead arm which

has a probe on the end of it. The machine is equipped to enable the arm to move the length and width of the table (the x and y axes) and up and down to the required extent (the z axis). When the probe touches an object it records the x, y and z co-ordinates of that point. After it has touched a large number—or the critical points—of an object, the shape of the object can be plotted and checked against the required shape.

Until the early 1970s, CMMs could only be used to inspect fairly robust materials because the probes had to make a quite emphatic contact. Then Renishaw of Britain introduced the touch-trigger probe, which would record co-ordinates even after a very light touch. This meant not only that CMMs could be used on delicate components and materials, but also that inspection routines could be speeded up.

Subsequent refinements of the Renishaw probe made it increasingly precise, forcing CMM manufacturers to make their machines more precise as well.

Demand for CMMs has soared in the past few years, and in the U.S. alone is running at over 2,000 units per year. Machines vary in size from those that would sit on a desk to units large enough to record the shape of a finished truck.

Inspection systems

IAN RODGER

The market leaders are Bendix and Brown & Sharpe of the U.S., DEA of Italy and Carl Zeiss of West Germany. British competitors include Vickers, Ferranti and a few independent specialists led by L.K. Tool. Renishaw continues to dominate the world market for probes, with an estimated 90 per cent share.

In the past few years, approaches to inspecting shape

have been moving rapidly along two broad lines more or less in step with other developments in factory automation.

First, more and more CMMs are being supplied with computer numerical controls (CNC) on them. CNC brings many of the same advantages to inspection as it does to metal cutting, notably the ability to direct the machine to handle a number of differently shaped products without long delays for reprogramming. More important, it provides the potential of integrating the inspection machine into a fully automated production cell. Few, if any, cells now in operation incorporate a CMM but some under development do so.

The second line of development is to build inspection systems into CNC machine tools themselves. This is particularly useful in grinding machines where the ability to monitor constantly both the depth of the grinding and the wear on the grinding wheel permit a much more accurate and rapid operation. Similarly, on lathes and machining centres, frequent

inspection leads to early detection of excessive tool wear and ensures accurate cutting.

The use of inspection equipment on machine tools does not necessarily obviate the need for dedicated inspection machines to examine finished components or assembled products, so growth is likely to continue along both paths.

The next technological development in CMMs is the adoption of optical scanning. A number of companies are working in this area, and Britain's L.K. Tool is among the leaders.

Mr Bryn Edwards, joint managing director, said he hoped to have one or two orders within the next month or so for a hybrid system the company has developed.

The main advantage of optical scanning over touch probes is speed of data collection. It is already used effectively in situations where only two dimensional readings are needed, such as the inspection of microchips, but it has limitations when applied to three dimensional objects.

Just in time to relieve the pressure

THE TREND in manufacture towards "just-in-time" production, a trend in which stock is supposed to be eliminated and inventory and work-in-progress kept to an absolute minimum, imposes greatly increased pressure on a warehousing facility. It reduces the volume of parts to be stored at any one time but raises the number of smaller transactions which need to be performed for the same production output.

If a warehouse is to work effectively in such a production environment, it must maintain tight control and absolute reliability, both areas which the latest technological developments in automated warehousing are tackling. The developments involve computerising the management of data concerning a load's identity, its location and volume, as well as the automation of the actual handling operations with the aim of eliminating all possible human error.

The basic principles of warehousing have, however, changed very little, according to Mr Charles White, managing director of Babcock FATA, a wholly owned subsidiary of Babcock International and the only totally British company in the

automated warehouse field.

In the most modern warehousing installations loads are still stored on pallets in racking using stacker cranes which still tend to be fitted with cabs even though operation is fully automatic.

This racking and stacker crane technology has been around for years. The main developments are in the control systems.

To achieve the reliability demanded by fully automatic operation 24 hours a day, seven days a week, Babcock FATA Fenamtec and Dexion now fit each stacker crane with its own microprocessor control. Each length of conveyor feeding the warehouse is fitted with Programmable Logic Controller (PLC).

The performance of both conveyors and stacker cranes is then monitored and managed by a central minicomputer whose operation is, of course, vital. If it fails, the warehouse comes to a halt.

Various options are available to ensure that, should this critical function develop a fault, downtime is kept to an acceptable level. Babcock's most recent solution is to provide a second computer on

"warm standby" which is installed in such a way that it can be used for non-critical computing work most of the time and can instantly take over control of the warehouse in an emergency. Transfer of control should hold up operations for no more than 15 minutes, according to Mr White.

Communication with the stacker crane for power and data transfer is another area

Warehousing

ANNA KOCHAN

in which developments are taking place. The traditional method of communication, using a catenary cable hanging from a rail, is being replaced by bushars. And, in one of Babcock's latest projects, data communication is being performed by laser.

An innovation in stacker crane design has, however, already proved its worth, and Babcock is being instrumental in monitoring its use. It is the double reach crane, a vehicle which is fitted with a special

fork so that it can lay pallets two deep on a rack. Double reach cranes installed in an automated warehouse at British Sugar enabled 28 per cent more pallets to be stored in the same space for less cost, Babcock claims, because the number of aisles, and hence the number of cranes, was halved.

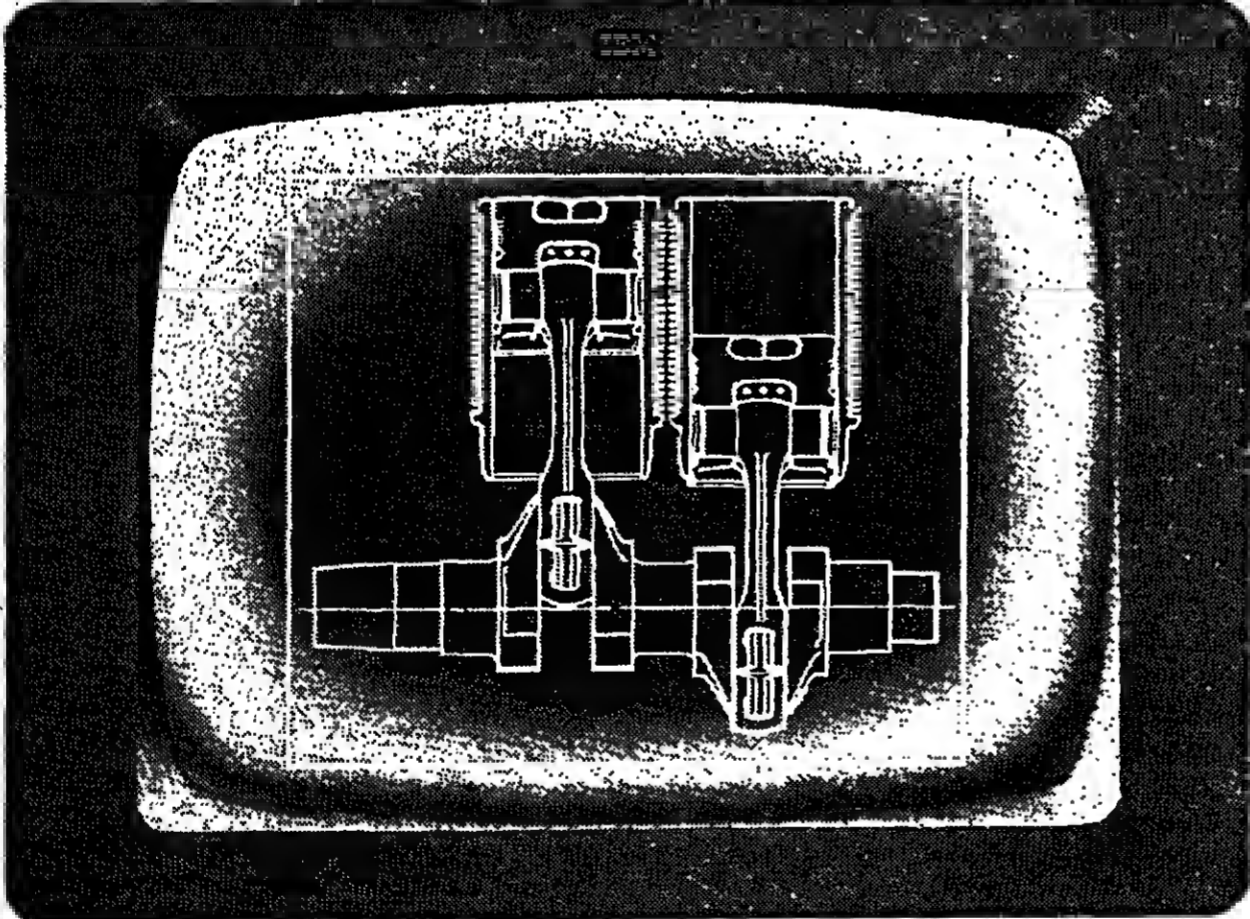
Looking to the future, Mr White sees radical changes coming to the input/output end of the automated warehouse. He believes that AGVs will be widely used where there is a medium throughput of work and a large variety of destinations for it. The AGV will take a load to the end of an aisle and automatically transfer it onto a short length of conveyor (about 3 or 4m) from where a stacker crane will automatically pick it up.

Babcock FATA recently introduced the first British made automated guided vehicle (AGV), stealing a march on its three major local rivals—U.S.-owned Dexion, Fenamtec (part of the J. H. Fenner group), and Lansing Bagmail. Babcock FATA's competitors still plan to introduce their own AGVs, probably under licence deals. The technology is rela-

tively mature, but the AGV is the key to total automation of both warehouse and factory floor.

Observers also believe that UK regulations limiting the use of the cheaper forms of racking may be lifted soon. The most attractive form of warehouse from the point of view of capital depreciation and tax deductibility is the type in which the racking also provides the structural support for the building surrounding it. However, UK regulations insist that this construction can only be built with hot rolled steel racking which is three to four times more expensive than cold rolled. The cost, therefore, becomes prohibitive in many cases.

In the U.S., no such regulations exist and warehouses using cold rolled steel racking in a structural role have been built. And the total population of automated warehouses in the U.S. is about 1,000 compared with a mere 70 in the UK. The regulations may be partly responsible for the disparity but Mr White believes this will soon change. With so few applications in the UK, he says, it is understandable that people are over cautious.



Using technology to build technology

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# MANUFACTURING AUTOMATION IV

Users are beginning to realise that "islands" of automation must be linked together if they are to be fully effective

## Towards the integrated factory

### The equipment users

ANNA KOCHAN

FACTORY AUTOMATION is now widespread. Robots are commonplace in welding and paint shops, CAD is just another tool in modern engineering design departments and a machine tool without computer control is almost a rarity. But, however successful these "islands" of automation are, proving in companies both large and small, the automated factory is still a long way off. And integration is the key to it. Users are beginning to face the fact that "islands" of automation must be integrated, that by automating processes, more pressure is put on the actual logistics of manufacture and the need to get parts in the right place at the right time. It all leads to the integrated factory in which the computer associated with each "island" of automation are linked to one another and to a computerised factory management and business system using a central data base to gather and maintain information. The concept, frequently referred to as Computer Integrated Manufacturing (CIM) is far from new but the reality is a long way away.

There is now a great awareness among manufacturing industry that CIM should be an ultimate target and the current interest in Flexible Manufacturing Systems (FMS), though not an essential part of CIM, is helping to bring this target one step nearer. An FMS is essentially a number of small "islands" linked up to form a large one.

Over the past year, dramatic developments have taken place regarding the application of FMS in the UK. The UK manu-

facturing industry has so far only implemented two FMS plants: the machining of pneumatic components at Normalair Garrett in Crewkerne, Somerset; and the SCAMP turning system at the 600 Group's Colchester Lathe Company. Now, however, more than 20 projects are under construction.

The first FMS projects operating in Japan and America are big and expensive installations, carried out by the very largest of companies which, in the U.S. are mainly in the aerospace and defence fields. In Britain, however, FMS applications is also being pioneered by very average, medium-sized companies engaged in a wide range of manufacturing, who are setting up systems of moderate complexity, modest size and realistic cost.

In addition, many of these companies plan to build their FMS up over a period of years. This is not because of any lack of conviction but because of the economic advantages of spreading the investment out, and also because it eases the process of acquiring the skills needed to operate, manage and maintain the new technology. This approach to FMS is supported by the Department of Trade and Industry's FMS grant scheme which allows a three-year maximum period of installation.

Without the DoT grants, very few of the companies now breaking the ice with FMS in the UK could justify making the investment because of the rigid justification procedures in manufacturing industry.

The benefits of FMS are very hard to quantify. One U.S. manufacturer who has successfully installed a system says: "Some of the greatest advantages come in the most unexpected quarters. You have to rely on gut feeling and not be too concerned with return on investment."

Unfortunately, British ac-

counting practice is not yet sufficiently liberated to accept this viewpoint.

One company which has worked out credible justification figures is Rolls-Royce which plans to set up some 16 FMS lines over the next four years at various plants.

Mr Frank Turner, manufacturing director of the Derby group of companies, insists that, within 12 months of its installation, each module of FMS must give sufficient saving on inventory to cover its capital cost. He is also looking for a reduction in unit costs of at least 20 per cent, about one-third of which is usually accounted for by reduced manpower requirements.

### Stress

UK companies prefer to keep the stress of reduced manpower requirements, for obvious reasons. Instead, they often use comparisons for alternative production methods to show that FMS is the most cost-effective way of modernising their production. The British United Shoe Machinery Company (BUSMC) in Leicester, for example, showed that the production of a typical part by stand-alone CNC machines was 2.5 per cent more expensive than by FMS, and produced 66 per cent more work-in-progress and 34 per cent more inventory. The figures are based on a 17-hour working day for the CNC machines and 24 hours for the FMS.

The justification process at Ford Motor Company, on the other hand, requires a return on investment of 20 per cent for any expenditure on machinery. To achieve this for the FMS it is now installing to machine cluster gears, Ford was dependent on a government grant.

The new system will replace 37 machines with 11 and use 13

men per day where 44 were employed previously.

At Anderson Strathclyde, Glasgow, a £6m system, supplied by Giddings and Lewis-Fraser, is expected to save £1m in inventory, and time spent in the machine shop will drop from four months to four weeks. This last is a crucial factor for a company like Anderson Strathclyde, which has a heavy commitment to speculative purchasing of castings to ensure prompt delivery. The risk factor should fall significantly, once FMS is implemented.

The sequence and speed of FMS implementation, like the justification method, varies from application to application.

The BUSMC project is one where the step-by-step approach is favoured, according to Mr Neville Burton, production director. The first phase, now installed, comprises one KTM machining centre, a KTM rail-guided pallet transporter and a number of pallet set-up stations.

In the second phase, a further machining centre will be added on and the transport system extended. Only then will a Direct Numerical Control (DNC) computer be linked up to the two machines and a pallet transporter to co-ordinate operations. At this stage, likely to be reached towards the end of this year, the development of the project will be reviewed. If market demand is high, the priority will be to link in a further two machines. If not, the handling system will be further automated to give greater capacity for unmanned operation.

A similar plan of action is being taken by Babcock Bristol which is currently setting up two machining centres: one with a Yamazaki machining centre; the other with a Yamazaki robot-loaded lathe. These will initially be fed with parts manually. A

pallet carousel will, at a later stage, be fitted to the machining centre and then linked to the turning cell by a conveyor so that palletised parts can be transferred from one cell to the other automatically.

A different approach altogether is being taken at Cessna Fluid Power in Glenrothes where three machining centres, two robots and a computer-controlled co-ordinate measuring machine as well as peripheral equipment will be installed and commissioned in the space of less than a year.

This £1m project will produce about 18 different gear pump parts.

It is being supplied by British Olivetti whose Italian parent company manufactures most of the equipment, their controls and the management computer. This is more of the components of FMS than any other supplier builds itself.

From these brief details of FMS projects being built today in the UK, it is clearly seen that extremely wide experience of FMS technology will be gained over the next few years. From application to application, the size of the product varies, so does the mixture of parts, type of machining, handling system and choice of major supplier.

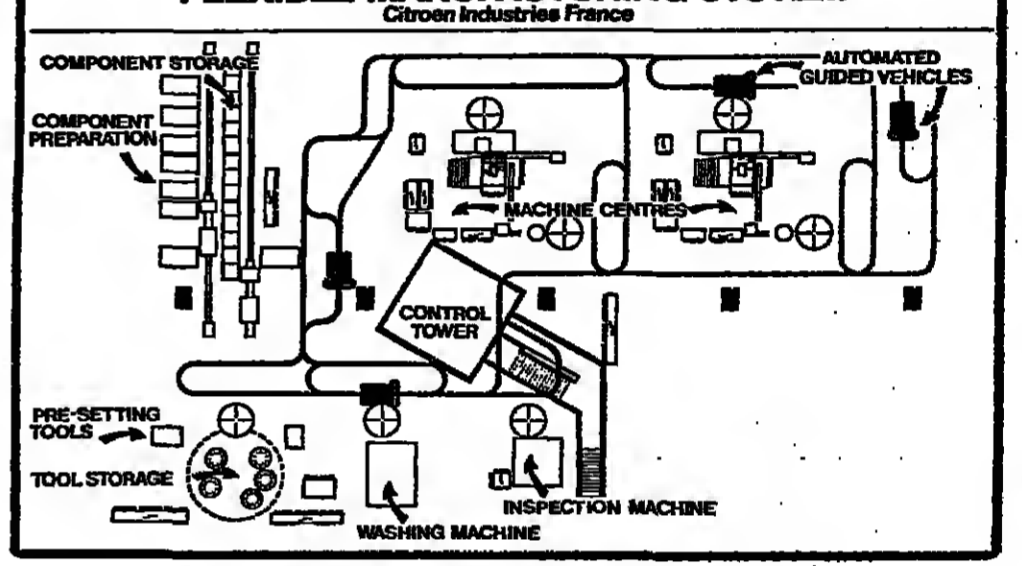
None of the installations, however, will be as complex as some of the massive plants being implemented in America or Japan, where automated warehouses and tool setting areas are beginning to be linked up to the machining activity to enable more prolonged periods of unmanned operation. But the way the development of FMS is making place in the UK should give industry in general a firm base on which to move forward towards the computer integrated factory.

Anna Kochan is deputy editor of the FMS magazine, published by IPS (Publications).

### MAJOR UK FMS INSTALLATIONS UNDER CONSTRUCTION

User	Value	Product of FMS and variety	Proposed equipment in FMS	Main supplier
Anderson Strathclyde (Glasgow)	£6m	large parts for coal cutters	six machining centres with rail-guided transporter	Giddings and Lewis-Fraser (American owned)
Babcock Bristol (Croydon)	£0.75m	signature transmitter components (100)	robot-loaded lathe, machining centre with pallet carousel and conveyor	Yamazaki (Waresa) (Japanese)
British United Shoe Machinery Co. (Leicester)	£2.5m	4-6,000 components for shoe-making machines	four machining centres with rail-guided transporter	KTM (Brighton) (British)
Caterpillar Tractor (Glasgow)	£1.5m	tractor gearbox parts (9)	four machining centres with rail-guided transporter	Scharmann (Birmingham) (West German)
Caterpillar Tractor (Glasgow)	£1.6m	eight large tractor components	two machining centres	Scharmann (Birmingham) (West German)
Cessna Fluid Power (Glenrothes)	£1m	gear pump housings (18)	three machining centres, two robots, press, drill and inspection equipment	British Olivetti (Milano Keynes) (Italian)
Dewey Mining Equipment (Tewkesbury)	Not yet announced	valve block parts (20 families)	machining centres and deep hole drilling machines	Not yet announced
Ford Motor Company (Halewood)	Not yet announced	cluster gears (9)	nine turning machines and two drilling machines	Not yet announced
GEC Industrial Controls (Kidsgrove)	£6m	printed circuit boards (1,300)	design, assembly and test equipment with laser-guided transporter and handling and assembly robots	GEC Electrical Projects (British)
Anonymous automotive component manufacturer	£5m	starter motor parts	seven machining centres with automatic transfer	Kewney and Tucker (Brighton) (American)

### FLEXIBLE MANUFACTURING SYSTEM



Two Flexible Manufacturing Systems in action

## How increased flexibility can jeopardise reliability

### Citroen's Meudon project

IAN RODGER

IN 1982 Renault dazzled the European industrial community with the unveiling of an ambitious FFR 45m (£37m) flexible manufacturing system (FMS) at its Bouthem factory.

Not to be outdone, France's other major car group, Citroen, last year showed off a FFR 46m FMS at its Meudon factory near Paris.

Two years ago, the Meudon project would have caused as much excitement as the Bouthem one, but by last year it was only one of many similar projects coming on stream in Europe and North America.

However, one element of the Meudon FMS did cause observers to pause. That was the enormous and complex tool handling system.

The Meudon project was an ideal application of FMS technology. It proposed to machine prototype mechanical parts for the development of new models of cylinder heads, engine crankcases and gear boxes.

The promise of FMS technology is to provide automated machining rapidly and economically for small batches of a number of different parts. The automobile industry is accustomed to automating the machining of very long runs of

particular parts, but faces long delays at the development stage because prototype parts have to be machined manually.

The Meudon FMS was designed with a view to production runs of only 20 to 90 units of varying sizes up to 50 cubic centimetres. It machines, washes and inspects each machined casting and returns it to a storage bay. The company claims an increase in effective operating time of the machine tools to 75 to 80 per cent from about 20 per cent on conventional machines.

### Imposing

The snag comes with the large degree of flexibility imposed on the system. In general, each different component has to be machined in a different way and so requires a different set of tools. Thus, the greater the variety of parts to be machined on an FMS, the greater the number of tools needed. Moreover, the number of tools increases more quickly than the number of components because of the need to maintain spares in case of breakage of increased numbers of tools poses no particular problems for the computers that control an FMS, but the physical arrangements needed for storage and transport can become imposing.

The Meudon FMS has storage capacity for 700 tools, 50 in each of the machining centres and 600 in a special auxiliary store designed and built by Citroen.

The auxiliary store is nearly 4 metres high and consists of five circular tiers, each with

five carousels holding 24 tools each. A manipulator in the centre of the store picks up the required tools as directed by the computer and places them on a portable carousel sitting on an automated guided vehicle (AGV).

The vehicle then delivers the carousel to the indicated machining centre, more than likely exchanging it for a carousel of used tools which it then returns to the store.

The same AGVs also transport components between their storage area and the various machines, which means that they are very busy and very vital.

Indeed, while a group of journalists was examining the system, an AGV loaded a carousel from the machining centre improperly and everything came to a halt.

Citroen claims that the Meudon FMS requires a total workforce of 20, compared with 44 that would be required to produce the same output on conventional machines. Moreover, the capital costs of setting up a traditional workshop would be slightly larger, so the FMS should justify itself.

But the Meudon system indicates one of the limits of FMS, which might be stated as follows. The more flexibility, the more tools; the more tools, the more reliability problems.

One hears of FMSs being designed that will have to cope with more than 1,000 tools, which suggests that the tool handling apparatus, complete with backup systems, will dwarf the actual cutting machines.

## Four years in the making

### Anderson Strathclyde's system

MATT LINCOLN

THE £5½m flexible manufacturing system (FMS) will have taken over four years from conception when it enters full production this summer at an Anderson Strathclyde Motherwell plant in Scotland.

Total cost will exceed £7½m, including planning, installation, feasibility studies, etc. The ASP committee and regional development authorities contributed around £1½m to the project. The EEC helped towards the training and commissioning costs.

The FMS will save 30 men and slice £1m from the production inventory at Motherwell. It

will machine 1,000 complex steel castings a year of an average of 2½ tonnes each.

"Total financial savings were sufficient to make this project viable and take no account of other hidden benefits. For example, the number of castings in progress at any one time will fall from 400 to 133," says managing director J. R. Mowat.

"In our view it is essential that manufacturers do not fall into the trap of assuming too much flexibility when considering FMS."

Expanding on his warning note, Mr Mowat emphasises: "Flexibility is a must. We must be able in an ongoing situation to introduce new work into the system. We must be able to ring the changes in the mix and quantities. We have found that the suppliers have not been too clever in this seemingly basic aspect of FMS."

In his opinion the customer has continually to take the initiative when telling the FMS

suppliers what is required. "The suppliers of this equipment should be leading and not following."

The company has planned 14 different castings for the FMS, of which several will be processed at any one time. "It is important that we get the right quantities and the right mix from the system in a certain period and not necessarily maximum spindle utilisation," says Mr Mowat.

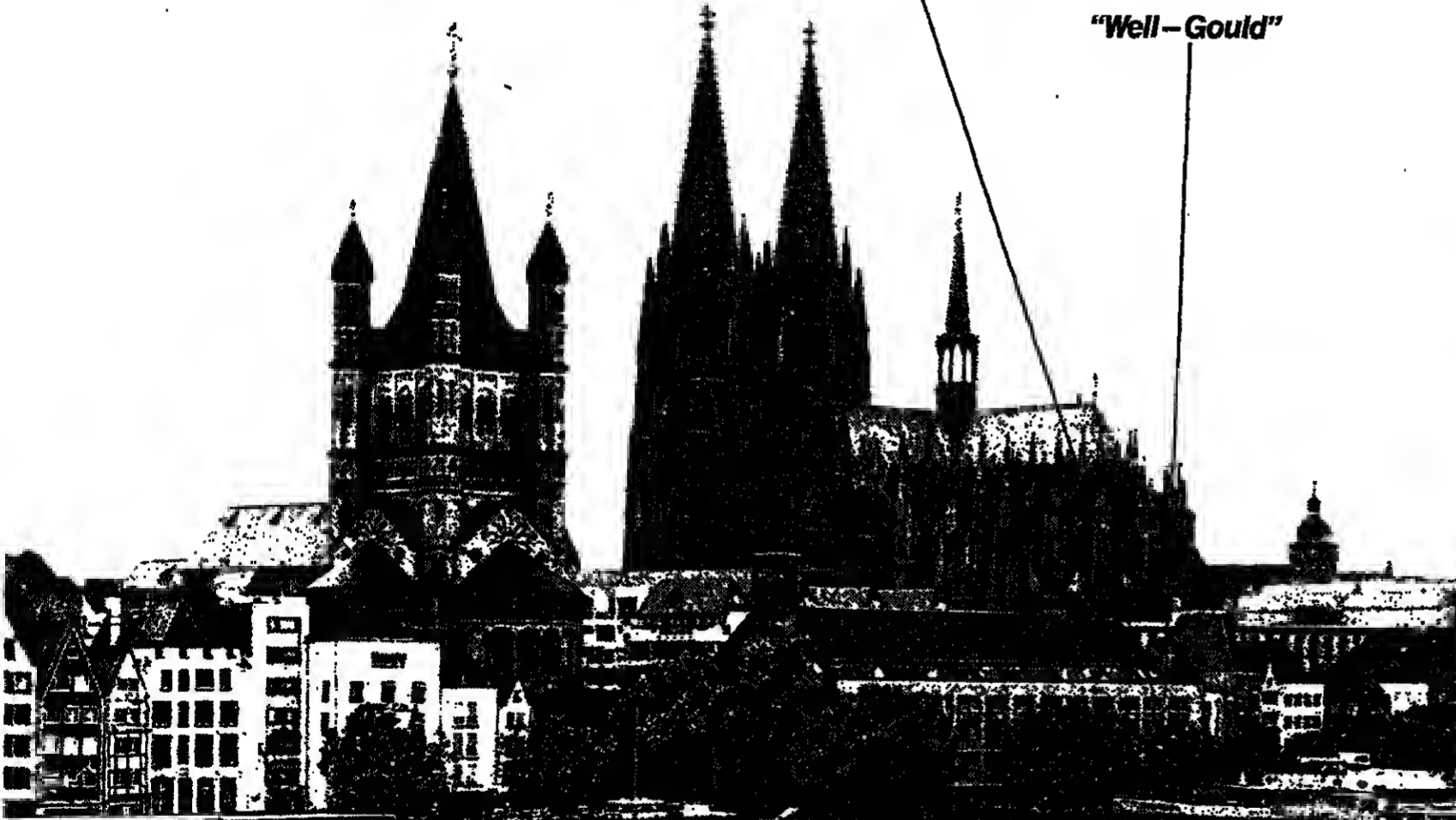
Each two and half tonne average casting unit needs 160 hours of conventional machining. Each size is small and the units acquire a high added value. Total production lead time for a mining machine is nine to 10 months. To remain competitive the company works to deliveries of three to five months, so involving itself in speculative machining.

Already the company has 30 NC (numerically controlled)

CONTINUED ON NEXT PAGE

"There's a lot of talk about the new industrial revolution. But who in Europe is really getting to grips with automation?"

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## MANUFACTURING AUTOMATION V

This page and the next carry profiles of companies which have led the way in their own fields

# Ready to take on the giants



IAN RODGER

"We want to be one of the top 10 companies in factory automation."

That is the sort of remark one might expect from a leading machine tool company, but it comes from Mr C. E. Whitney, chairman of Allen-Bradley of the U.S., a long-established, privately owned manufacturer of industrial controls.

Allen-Bradley was started by two entrepreneurs in 1903 and soon specialised in making electromechanical relays and electric motor starters, mainly for the automotive and machine tool industries.

The company had a reputation for solid quality and a reluctance to exploit new technologies until others had proven them. For example, it was in a position 15 years ago to lead the world in computer numerical controls (CNC), having acquired some early technology from Bunker Bruma. Later the U.S. took over a pioneering NC business from Ferranti of Britain, but it waited until Faucet of Japan and others had proven

the market potential, and is still trying to catch up.

A-B also developed a programmable process controller in the late 1960s, but was slow to market it.

"We tried a lot for seven or eight years," Mr Whitney says, "but now it is very close to being our top business, level with motor starters."

The company has since become more disciplined. "In the mid-1970s we realised that the computer was going to come down into our territory on the shop floor," he says.

It has rounded out its product line with the development of a fine of electronic drives for AC electric motors and focused its marketing on five industries it believes will have an above average demand for control equipment in the next few years—forest products, food, chemical, machine tools and metal manufacture and mining.

The company is still losing money on its AC drive venture but is very confident about the potential. Indeed, it is widely assumed that the development of low-cost AC drives will result in the gradual displacement of DC motors, which are less durable than AC motors, on industrial equipment. Mr Whitney believes that his products are now competitive and cover the main areas of growth in the factory automation field. It also claims a

competitive advantage.

"Unlike some others, we grew up on the factory floor, and we have always made our equipment tough enough to work in factory conditions," Mr Whitney says.

In the CNC field, it looks as if A-B would be at a considerable disadvantage to Faucet, which benefits from very high volume production. But A-B points out that the circuit boards for its CNCs are the same as for its programmable controllers and so its total volumes are similar to those of Faucet.

A-B predicts that the market for CNCs will continue to grow rapidly, mainly because many machine shops still have to replace conventional machine tools with CNC ones.

### Product improvement

Also, the machine tool builders which now make their own CNCs will not be able to keep up with the specialist manufacturers in terms of product improvement and price reduction, and so will start buying from the specialists.

As for programmable controllers, the market is expected to expand rapidly as more and more segments of manufacturing are automated and linked together.

"We estimate that 50 to 60 per cent of U.S. factories will have computer integrated manufacturing by 1990," Mr Whitney says. "That's the

technology we are chasing."

To improve its market penetration, A-B entered into a joint manufacturing and marketing venture with Olivetti of Italy last year called Oesi/A-B, to cover Western Europe. A similar venture is planned for Japan.

The company is also interested in supplying other factory automation equipment, such as sensors, terminals and communications devices, but it prefers to take minority stakes in small manufacturers of these products rather than make outright acquisitions or diversify through lateral development.

As a private company, it does not have access to public equity markets, and the trusts that control it do not permit it to take on any long term debt.

Little financial information is published, but Mr Whitney says turnover is just under \$1bn per year and growing at about 20 per cent annually. He says A-B has had slim profits since 1979, but has increased its spending on research every year.

A-B recognises that it is a relatively small company competing against electrical giants such as General Electric, Westinghouse and Gould of the U.S., Siemens of West Germany and Fujitsu of Japan.

"Today we are as good as anything in the business," Mr Whitney says. "I don't know if we can keep up. Only time will tell."

## Pioneer in advanced electronic machine tool techniques



IAN RODGER

new method of carrying out some types of machining very accurately without the use of conventional boring and drilling tools.

Also known as spark erosion, the technique involves forming an electrode into the shape of the hole to be made in the metal and then aiming the electric current at the specified point on the object. The spark erosion technique is particularly useful for machining in awkward places, such as the inside surfaces of cylinders, because the electric charge passes harmlessly through the metal to the required point before beginning to "erode" it.

The technology also excels at machining very hard super alloys.

Apart from the cutting technology, EDM machines operate like an ordinary boring or drilling machine and, like them, can be subjected to computer numerical control. Amchem has been especially successful at developing the necessary software and control systems to automate EDM machines and build complex production cells.

Typical applications for EDM machines are in boring the ventilation cavities in turbine blades and drilling the air entry holes in combustor shells.

Up to now, the company's main job has been designing and building bespoke machines to perform specific tasks. "Each part creates its own difficulties," Mr M. G. Whitmore, director, says. "Our business has not been amenable to high volume production."

However, advances in automation and the use of robots are bringing changes. For example, Amchem is just putting the finishing touches on a \$200,000 turbine blade machining system for Rolls-Royce.

It consists of three identical EDM machines, an inspection machine, a tool store, a robot and a conveyor to supply the raw parts. It can work unattended for up to six days. If one of the EDM machines develops a fault, the control system simply excludes it, and machining continues on only two machines.

The weakness of this cell is that it is designed around a single part. It could be modified to machine more than one shape, provided the differences in shape were not significant.

Amchem is already taking the next step in flexible automation in a \$400,000 cell it is building for General Electric of the U.S. This cell has been designed to use 37 electrode tools to machine 11 different fuel control valve parts in a sequence set by computer. The computer control also directs a robot to

pick up from labelled positions in a carousel the desired component and then the tool it requires and to install them in the EDM.

Amchem hopes to keep ahead of its competitors by devoting a large part of its resources to research and development. Also, more than 30 per cent of its employees are qualified to graduate level or equivalent.

Mr Whitmore anticipates a 20 per cent growth in sales next year and, based on Boeing's forecasts of demand for aircraft, believes this growth rate should be sustained at least for the next three years.

"We have got more inquiries than ever. Our competition comes mainly from the U.S. but they tend to be machine tool companies trying to adapt standard machine tool technology. We have beaten the Japanese three times on U.S. jobs."

## Anderson's FMS

CONTINUED FROM PREVIOUS PAGE

and CNC (computer numerically controlled) machine tools organised on a manufacturing cell basis to produce components. Four years ago the company first supplied CNC horizontal machining centres to the heavy steel casting industry. "We halved the machining time to 80 hours," says mining divisional production director G. Timson, "and so cut manufacturing lead time by three months."

Taking up the story Mr Timson says: "We realise we could make a big impact on lead time by introducing CNC. But we had no idea of FMS." He continues: "During a visit to the U.S. I saw a Kearney and Trecker FMS operating at Allis Chalmers in Milwaukee and it appealed."

On his return he started a comparative feasibility research study into "stand alone" machines and FMS systems. Mr Timson's department literally began with a pile of drawings and spent around two man-years to form economic assessments on FMS. When completed, his department presented the pile of drawings as a project to ten European, Japanese and U.S. suppliers. The choice narrowed to two U.S. suppliers whose economics matched closely the Anderson Strathclyde assessment. The contract was placed with Giddings and Lewis Fraser (G & L) of Arbroath in September 1981.

Why G & L? "This supplier already had wide experience of our products," answers Mr Timson. "It also appeared to be more advanced and had more installations than anyone else." Anderson Strathclyde was able to affect an 80 per cent purchase of UK-manufactured FMS equipment necessary to qualify for the ASP committee grant.

From the date of the contract signing Anderson Strathclyde appointed a full-time FMS project engineer, Mr I. Murdoch. He had to supervise the accommodation of the FMS in existing buildings. To make way, 149 machine tools were relocated between September 1981 and June 1982. Advantage was taken to re-organise these into

production cells and to rationalise tool durability.

"The design of the FMS and DNC (direct numerical control) system was left conceptually to G & L, says Mr Murdoch. During the contract period Anderson Strathclyde insisted its own people did not interfere with methods—despite the company's own earlier economic exercises. "G & L planned the methodology but we advised without responsibility," says Mr Timson.

"We changed the track-guided vehicle to a wire-guided one to suit the building. This vehicle also facilitates easier extension later," says Mr Murdoch. "We also assisted in the specification of the tooling management systems."

"We keep tool changing to a minimum. There are 600 tools of 400 varieties in the FMS," says Mr Murdoch. Two of the GL 60 machining centres are tooled identically for roughing, drilling and tapping tools are duplicated in the others.

In theory a new job can be introduced without a tool magazine change. "Wishful thinking perhaps," says Mr Murdoch, "but it sets up a design standard of preferred sizes, to reduce tooling inventory and maintain quality standards."

"After placing the order we devoted 12 man-years to the FMS project but this is included in the £7.1m estimated total cost." Mr Timson reckons that three months will have been saved from the production lead time. "Peak time for the FMS is estimated on a proper discounted cash flow but is said by Mr Timson to be "slightly better than the normal standard."

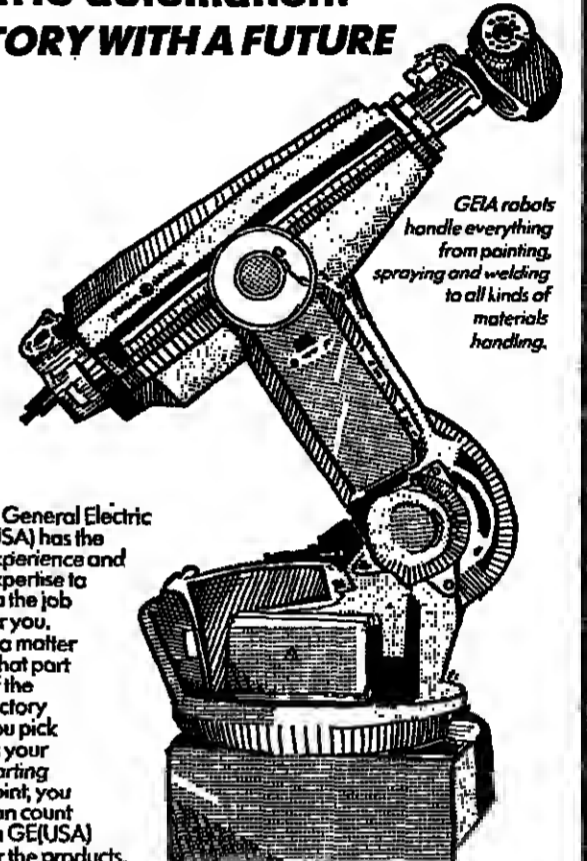
The great unknown remains machine tool durability. "Spindle uptime" (time actually cutting metal) will be four times greater than with a stand-alone machining centre," says Mr Timson.

When is the next FMS coming? "Certainly FMS is not a thing to turn away from," answers Mr Timson. "We have yet to go through the absorbing process. The next FMS will be easier but we can't see ourselves buying conventional machine tools again, only CNC and systems."

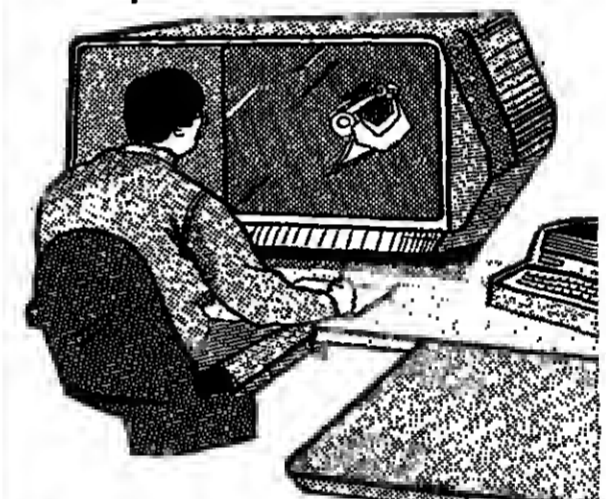
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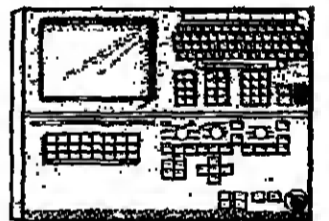
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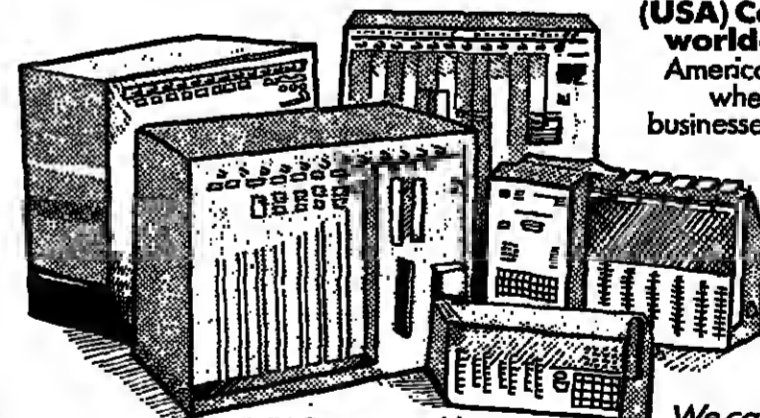
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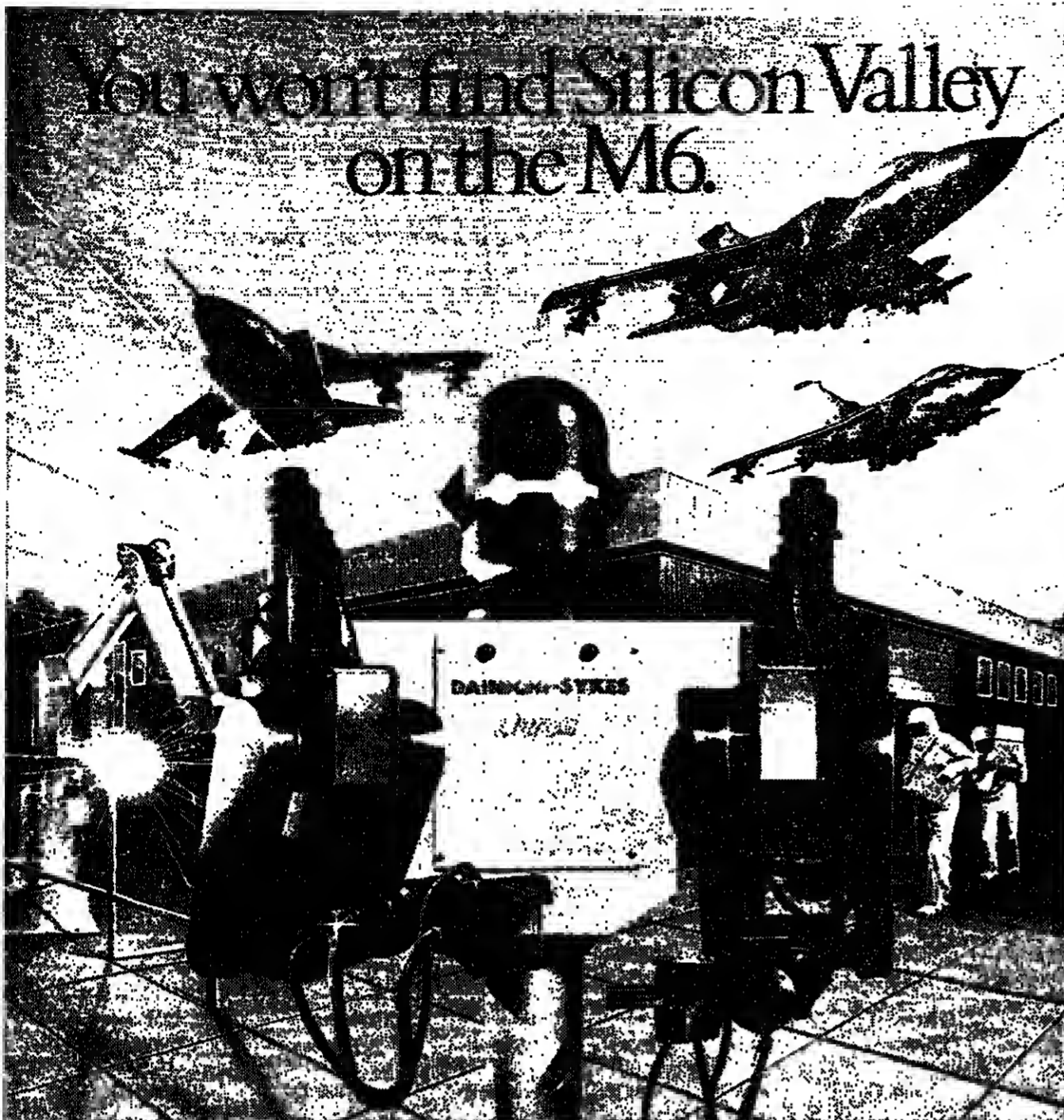
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USA

\*General Electric Company of the USA is not connected with the English company of a similar name.

## MANUFACTURING AUTOMATION VI



You won't find Silicon Valley on the M6.

Place names don't tell you the full story. If you're looking for Silicon Valley you won't find it on the M6. What you will find is Central Lancashire, with a remarkably high concentration of high technology companies.

Far from being the land of bobbins and brass foundries, it's where Dainichi-Sykes develop and programme their robots.

Where Plessey are now pioneering the

latest in telecommunications systems. It's also the home of British Aerospace's Tornado, the advanced multi-role combat aircraft.

And where companies like Rockwell, GEC and Thorn-EMI, to name but a few, are working towards tomorrow's world.

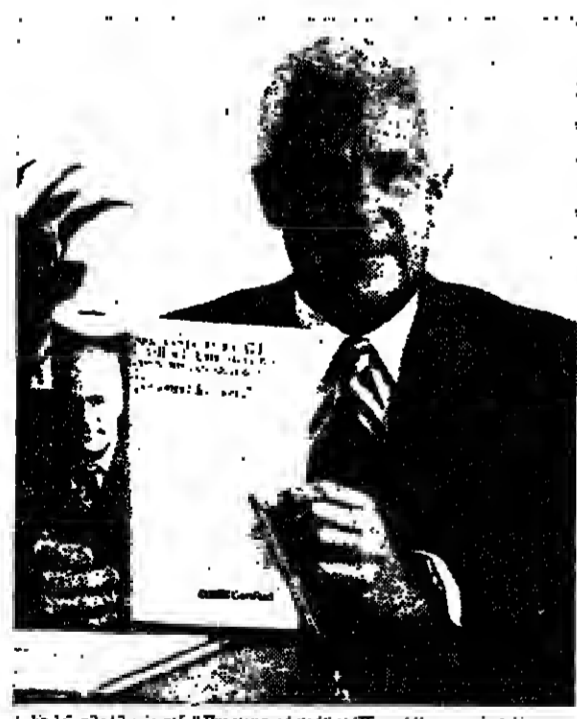
The way things are going Central Lancashire could soon be as well known for products featuring silicon chips as it is

already for the kind which come with fish. So if your business depends on high technology skills, don't ring international. Ring Bill McNab FRICS, Commercial Director, on Preston 38211.

**Central Lancashire**  
A BETTER PLACE TO BE

CENTRAL LANCASHIRE DEVELOPMENT CORPORATION, CLEVELAND HALL, ROSSER AVENUE, PRESTON PR6 6AA, TEL: PRESTON 38211

## The importance of "quality management" to the survival of your business.



In 1981 GenRad predicted that ATE would become pivotal in the quality control and assurance of the 80s.

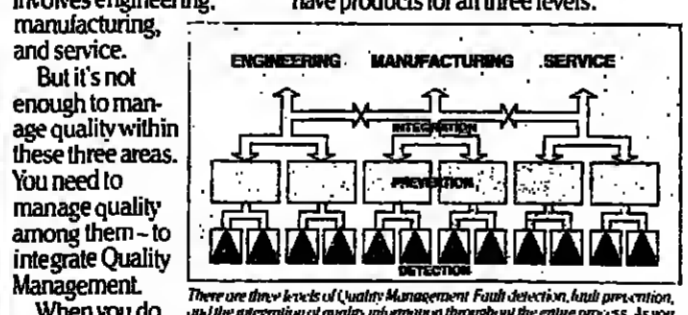
Everybody's talking about quality. But most of that talk tends to be in global, abstract terms. Quality is not abstract. It's hard edged and real. And for many electronic companies, there's only one relevant definition of quality - "that which meets your customer's expectations."

Customer expectations involve things like functionality, price, availability and reliability.

At GenRad, we have the plan and

products to help you improve quality. Quality is measurable and manageable.

To improve quality, you must improve the process that creates your products. A process that involves engineering, manufacturing, and service.



But it's not enough to manage quality within these three areas. You need to manage quality among them - to integrate Quality Management.

When you do this, you'll get to market faster with products that perform more reliably, and at lower cost.

In other words, you'll meet your customer's quality expectations. And your own business expectations.

**Quality Management begins with testing.**

Before you can improve quality, you must be able to measure it. And determine what's good, what's bad, what works and what doesn't.

The source for such vital information is automatic test equipment (ATE). And we know how to get that information because we've been a world leader in ATE since the industry started.

But Quality Management

doesn't end with testing. You must take the information generated in testing, refine it, and put it to use where it can do you the most good.

**GenRad's approach to Quality Management.**

At GenRad, we believe there are three levels of Quality Management. And we have products for all three levels.



Level 1 is fault detection - using testers to find out what's good and what's bad. Level 2 is fault prevention. By leveraging information created in Level 1, you can test the entire process and find it, helping you to prevent faults instead of just finding them. Level 3 is the integration of Quality Management - where quality information is disseminated throughout the entire engineering, manufacturing and service process. Level 3 will provide your products with the highest quality of all. It also provides your company with the highest productivity.

For more information on GenRad's approach to Quality Management and a free copy of Philip Crosby's "Quality is Free," write us and include your business card:

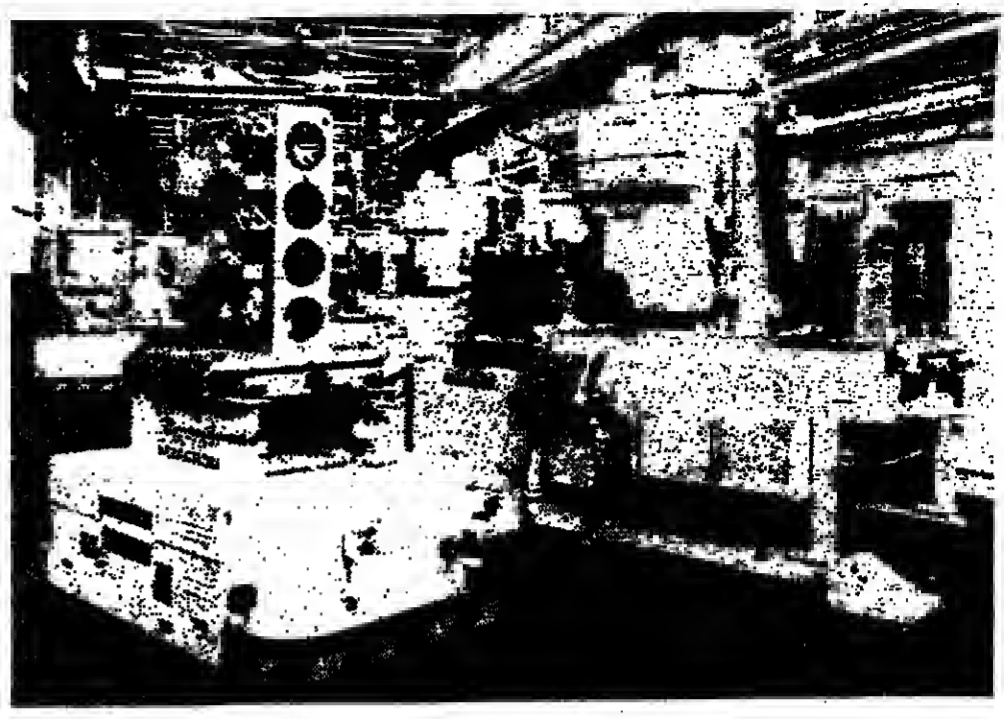
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**MOBILISING manufacture:** this Cincinnati Milacron system shows how individual machine tools could be used more intensively by linking them with automated guided vehicles.

In the foreground, one of the two AGV's included in the system, moving along paths determined by wire imbedded in the floor, has picked up finished, palletized, workpiece from the machining centre in the background and is delivering it to an unload station elsewhere in the system.

The AGV in the background is about to deliver a rack of replacement tools to the machining centre in the foreground. Tool interchange from the receiver rack to the machining centre's storage chain is automatic and computer controlled.



## 'The real harvest will come the other side of 1985'

### ASEA

KEYVIN DONE

ASEA, Sweden's heavy electrical engineering and electronics group, is the country's fourth largest industrial concern and Europe's leading manufacturer of industrial robots.

Robotics is one of its fastest growing operations, and although the expansion in the world market has slowed in the last two years, ASEA has continued to increase its volume sales by 50 per cent a year, as it has succeeded in capturing a growing share of the world market.

The group has boosted its robot sales from just 25 in 1975 to about 1,100 in 1983. In the last four years sales have climbed from 240 in 1980 to 307 in 1981 and 750 in 1982. New orders booked in 1983 were worth around SKr 600m with invoiced sales of a little more than SKr 500m.

In 1982, ASEA had a total group turnover of SKr 25.8bn. During 1983 it has virtually doubled its profits, helped by a far-reaching restructuring programme carried out during the last three years. Re-organisation has taken it into new markets which earlier were closed either because the factory appli-

cations were too complicated or too costly.

With camera eyes, the new generation of robots can identify and locate up to 99 different objects which can be picked up from a factory conveyor belt for further processing or machining. Such improved vision systems offer considerable reductions in the costs and problems of materials handling.

ASEA has installed more than 3,000 electrical robots around the world since it first entered the market in 1974. It claims a market share in Europe of around 30 per cent and 8-10 per cent in the U.S.

During the brief history of the robotics industry ASEA has claimed several firsts including, most significantly, the introduction of the first electrically-driven robot in 1974. Recently it has launched a new industrial robot with a so-called "integrated vision system," which is claimed to be the first complete seeing robot to be working under actual factory production conditions anywhere in the world.

Robots with simple binary vision - the ability to distinguish silhouettes - have been available previously, but ASEA claims to be leading the world with the introduction of more sophisticated vision systems, which can be simply programmed by factory shop-floor workers.

ASEA hopes that the new robots will take it into new markets which earlier were closed either because the factory appli-

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ASEA hopes that the new robots will take it into new markets which earlier were closed either because the factory appli-

are yet to be explored in Japan.

ASEA now has robot centres established in 11 countries, Sweden, West Germany, the Netherlands, the U.K., Spain, Italy and France in Europe, in the U.S. and Canada and in Japan and Singapore.

As well as sales and service the centres also offer most importantly training facilities and project support to customer companies.

ASEA is still sceptical about visions of "factories of the future" preferring to take the development of manufacturing automation step by step. "The fully automated factory still has a long way to go," says Mr Bjorn Weichbrodt.

"There is no market for this yet. You must go gradually. People are ready to accept islands of automation. If I tried to set automated factories without people, customers would be very hesitant. The question of how the road will look from robots to factory automation is very interesting, however."

Equally ASEA is not interested in simply selling robots, however. It admits that the easy installations have already been done.

It is trying to avoid the cut-throat price competition in the market for standard robots by emphasising a marketing approach that concentrates on offering "engineering solutions."

"We believe there is room for several winners in the market for standard robots," says Mr Weichbrodt, "but not nearly as many companies as are active today."

## Confidence remains high despite experiencing worst year ever

### CINCINNATI MILACRON

TERRY DODSWORTH

AS IN ALL recessions Cincinnati Milacron, the largest machine tool manufacturer in the western world has stood right in the teeth of the gale. When manufacturing industry slumps Cincinnati suffers and nothing could better demonstrate the severity of the last downturn than the U.S. company's results: for the first time in a history that stretches back 100 years, the company lost money in 1983.

Cincinnati still talks, however, with the utmost assurance about the future. This may partly reflect the confidence built up from its explosive growth during the late 1970s, when after a period of relative stagnation sales more than doubled from \$420m in 1976 to \$834m in 1981. Net earnings per share grew in the same period from 45 cents to \$2.98, and in 1980 it made an exceptional 26.5 per cent return on equity.

All this, turned round in the recession. Sales slumped back by 20 per cent to \$760m in 1982, and fell even further in 1983, when nine-month net losses amounted to \$11m. Yet Cincinnati regards this as a temporary setback, and after cutting back on capacity, it is now beginning to see an upturn in orders as well.

In the third quarter of 1982, new orders showed no improvement for the third consecutive period, and exceeded shipments for the first time in three years.

The group's short-term earnings possibilities, are compounded by what it sees as a key longer-term role in the manufacturing revolution. Cincinnati has an apostolic fervour about the need for industry to move towards flexible work centre robots and new

materials. If manufacturers respond as it thinks they will, the Ohio-based company will be at the centre of the change.

Over the past few years Cincinnati has been gearing itself up for this switch in production technology on the basis of thinking which goes like this:

First, it believes that the spread of electronics and the reduction in their costs makes it inevitable that they will be increasingly applied to manufacturing. Artificial intelligence makes it possible to build virtually unattended, highly flexible systems, which help industry in a variety of ways. In particular, low batch production becomes a much more feasible proposition. This in turn makes it easier for producers to respond faster to market pressures, while reducing stocks, since the batches can be directly related to immediate orders.

Secondly, Cincinnati argues that the world will steadily switch over to new synthetic

material. Indeed, it stresses that this has already begun. According to Mr Clifford Meyer, president, total volume production of plastic already exceeds that of steel, aluminium and copper combined.

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